DOCUMENT RESUME

ED 242 963 CE 038 819

TITLE	Future Curriculum Needs in Vocational Education and Training. Proceedings of the East Central Network for Curriculum Coodination and the United States Department of Education, Region V (Chicago, Illinois, October 26, 1983). Public Hearing.
INSTITUTION	East Central Network for Curriculum Coordination. Springfield, IL.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	84
GRANT	R-00-64-D-0371-456
NOTE	121p.
PUB TYPE	Collected Works - Conference Proceedings (021) -- Viewpoints (120)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Agency Cooperation; Attitudes; Coordination; *Curriculum Development; Curriculum Research; Educational Development; Educational Finance; *Educational Needs; Educational Research; Educational Resources; Hearings; Information Networks; Linking Agents; Postsecondary Education; *Program Effectiveness; *Program Improvement; *Research Coordinating Units; Secondary Education; State Federal Aid; *Vocational Education
IDENTIFIERS	East Central Curriculum Coordination Center IL; Illinois

ABSTRACT

This publication contains the testimony of a hearing held to learn about the regional curriculum needs and priorities of individuals and groups from Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Virginia, and Wisconsin. The East Central Curriculum Coordination Center is described as the largest of the six curriculum centers, standing as an example of the cooperative efforts of 12 states, and is the only nationally organized, regionally coordinated, and locally controlled vocational curriculum instructional organization. The technical assistance provided by the center includes assisting states, developing tools, and implementing inservice activities. Liaison and networking relationships include promoting personal communications with individuals, groups, and curriculum consortia and providing a fast and effective means for obtaining and disseminating information. Quality and effectiveness can be improved through the development of a computerized library system. Recommendations emerge from the synthesis of testimony. They include to seek federal funding to expand ongoing services, to build more effective liaison and networking relations, to incorporate those aspects that will increase the quality and effectiveness of the networking, and to acquire federal and state approval and funding to implement clients' suggestions and meet curriculum needs throughout the East Central Network. (KC)

ED242963

PUBLIC HEARING

FUTURE CURRICULUM NEEDS IN VOCATIONAL EDUCATION AND TRAINING PROCEEDINGS

Sponsored by the East Central Network for Curriculum
Coordination, Springfield, Illinois, and United States
Department of Education, Region V, Chicago, Illinois.

Prepared for
U.S. Department of Education
by
East Central Network for Curriculum Coordination
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Spring 1984

CE 038819

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ACKNOWLEDGEMENTS

The public hearing **Future Curriculum Needs in Vocational Education and Training** was a comprehensive assessment effort involving the contributions of many people.

The support, cooperation and expertise provided by the following people made it possible to conduct the public hearing:

U.S. Department of Education, Region V, Chicago

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Dr. Vinston E. Birdin, Acting Chief

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Mr. Peter Johnson, Executive Director, Illinois State Advisory Council for Vocational Education
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Printing costs for the cover of this document were donated by the
Illinois Vocational Curriculum Center
which is supported by the
Illinois State Board of Education,
Department of Adult, Vocational and Technical Education
Research & Development Section

PREFACE

The concept of a National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE) emerged from the recognition of the fragmented and duplicative effort of curriculum development and dissemination and the assumption that coordinated curriculum management is essential to improve educational effectiveness.

The concept became a reality with the establishment of six regional vocational curriculum centers under the direction of the NNCCVTE Director's Council and the selection of 57 State Liaison Representatives. "The establishment of a national curriculum network in the 1970s was ahead of its time as now evident in the new information age".[1] The need for assistance in curriculum development and resources which are easily accessible and ready to use is greater than ever, with the prediction of an even greater demand in the future due to technological advancement and increase of new information. We are no longer an industrial society but an information society.

"Aside from teachers themselves, curriculum is the major resource for education/training. Professionals in education and training must have opportunities to benefit from the research and development efforts of their peers in all manner of sponsoring agencies. The NNCCVTE and the East Central Network Curriculum Center have made great strides in this regard."[2] NNCCVTE is involved in the distribution of resources in all vocational subjects; it does not emphasize a few as do other organizations involved with vocational education. The people involved with any aspect of vocational curricula have to start utilizing the best of efforts. "The luxury of duplication is no longer affordable; nor can valuable time and shrinking resources be used to develop and revise curriculum from scratch. What has been done, imperfect as it is, must be used with necessary changes made if an attempt is made to keep pace with the changes occurring in industry and education."[3]

Based on the premise that curriculum is the foundation for learning and the technological pace has hastened change, the East Central Network Center's staff became concerned about keeping abreast of the changing needs of its clients. In order to do this--know the needs of the clients and how best to meet these needs--the staff decided a public hearing would be the best method for assessing the clients to determine the changes occurring in vocational curriculum needs.

It is through the cooperative efforts of individuals concerned about vocational curriculum matters that the hearing became a reality. The dedication of individuals is evident through the giving of their time for travel to the hearing and preparation and delivery of their testimony.

This publication is the result of the hearing **Future Curriculum Needs in Vocational Education and Training** co-sponsored by the U.S. Department of Education and the East Central Network for Curriculum Coordination in Vocational and Technical Education. The content represents testimony received from individuals representing the states of Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Virginia and Wisconsin.

1. Gloria Kielbaso, written testimony, 20 October 1983
2. Ronald W. Stadt, testimony delivered, 26 October 1983
3. Vernon Register, testimony delivered, 26, October, 1983

EXECUTIVE SUMMARY

Public Hearing
Future Curriculum Needs in Vocational Education and Training

This publication is the result of the hearing **Future Curriculum Needs in Vocational Education and Training** co-sponsored by the U.S. Department of Education and the East Central Network for Curriculum Coordination in Vocational and Technical Education. The summary represents testimony received from individuals representing the states of Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Virginia and Wisconsin, and government, education, and business organizations.

The hearing was held to learn about the regional curriculum needs and priorities. Interested individuals and groups were invited to testify on curriculum needs in vocational curriculum development at the U.S. Department of Education, Region V on October 26, 1983, Chicago, Ill.

Testimony was divided into five categories. Under Uniqueness of Center the East Central Curriculum Coordination Center is described as the largest of the six Curriculum Centers, standing as an exemplification of the cooperative efforts of twelve states and is the only nationally organized, regionally coordinated, and locally controlled vocational curriculum/instructional organization. The Technical Assistance provided by the Center includes assisting SLRs, developing tools such as the Task Listing Catalog, and implementing in-service activities. Liaison and Networking Relationships includes promoting personal communications with individuals, groups and curriculum consortia providing a fast and effective means for obtaining and disseminating information. Though the Center is known for the quality and effectiveness of its services, two factors, Quality and Effectiveness, can be improved through the development of a computerized library system. This will enhance the possibilities of getting information to individuals implementing curriculum. Suggested Responsibilities and Projects focused on the need for a computerized library system. Such a system would provide the latest state-of-the-art in curriculum, a timely collection of resources and quick retrieval and dissemination of information. Five recommendations evolved from the synthesis of testimony. They are:

- Seek federal funding to support the East Central Network concept.
- Expand the on-going services provided by the East Central Network.
- Build more effective liaison and networking relations.
- Incorporate those aspects which will increase the quality and effectiveness of the present East Central Network operation.
- Acquire federal and state approval and monetary support to implement clients' suggestions and meet curriculum needs throughout the East Central Network.

Justification for these recommendations are cited throughout the proceedings. The most important singular justification for each recommendation follows:

- The East Central Network Curriculum Center is the only nationwide regional organization functioning to disseminate curriculum resources representing all areas of vocational education. Its services reach thousands of people.

- The support and inservice activities facilitate curriculum design/implementation but an increased effort is needed to reach more levels of vocational education programs and staff.

- Liaison and networking relationships provide means for problem solving, contribute to maintaining/updating vocational training programs, allow for faster intra-state personal contacts and allow adoption or adaptation of curriculum.

- Conversion to a complete computerized research library system would make available the latest resources and provide quicker access and dissemination of information.

- A faster, more efficient information retrieval system including state-of-the-art topics, automatic updating with data available on floppy disks would allow time to focus on other concerns such as articulation, national priority topics and incentive devices.

Recommended action to meet the East Central Network's clients' needs as identified from the public hearing would focus on two areas -- financial support and computerized system. Specific action would include:

- Develop proposals responding to RFPs issued by private and public agencies.

- Design the network system so that information reaches all curriculum-involved people including those who implement curriculum in the classroom or training site and those involved with minority populations.

- Develop an advertising campaign which will reach the vocational education population to inform them of the services available through the National Network for Curriculum Coordination for Vocational and Technical Education.

- Design and disseminate a computer packet and competency-based education (CBE) packet. The computer packet would include state-of-the-art technology, explanation of a complete computerized library system, information on national computer networks and review and evaluation of software. The CBE packet would contain new materials, a directory listing model CBE schools and programs, personnel, and vocational systems.

- Emphasize to the state and federal authorities the need for a complete computerized East Central Curriculum Center operation. The computerized system would provide quicker service, more organized information, assessment information, resource files, and curriculum components.

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CHAPTER I

INTRODUCTION

The East Central Network Curriculum Coordination Center sponsored a public hearing, **Future Curriculum Development Needs in Vocational Education and Training,** with the U.S. Department of Education Region V, Chicago, on October 26, 1983.

The public hearing was held to learn about the regional curriculum needs and priorities. Interested individuals and groups were invited to testify on future curriculum needs in vocational curriculum development. It was desirable to hear from as many people as possible--people in industry, business, education--who are involved in some aspect of preparing employees for the work force; people who use curriculum and are aware of present and future curriculum needs.

Purpose

The East Central Network, if it is to continue to be an effective vocational curriculum center, must assess itself in terms of the compatibilty of its goals and objectives with the curriculum needs of the clients it serves. The public hearing was held to:

- Identify existing and future curriculum needs`
- Establish long term and short range goals
- Determine the direction for the Center to best meet the needs of its clients.

Meeting Information

The U.S. Department of Education Region V at 300 South Wacker Dr., Chicago, was the site for the public hearing. The hearing was held in the office of the Secretary's Representative on the 16th Floor, October 26, 1983.

The agenda included:

8:00 a.m.	Registration
8:30 a.m.	Welcome H. Robert Hewlett, Acting Regional Director Dr. Vinston E. Birdin, Acting Chief James R. Galloway, Assistant Superintendent, Department of Adult, Vocational and Technical Education
9:00 a.m.	Briefing and Introduction of Panel Members Rebecca S. Douglass, Director, East Central Network and Illinois Vocational Curriculum Center
9:15 a.m.-Noon	Testimony and Comments
1:00-4:30 p.m.	Testimony and Comments

Although Chicago is not centrally located within the U.S. Department of Education Region V area or the twelve states of the East Central Network region, its transportation facilities allowed for easy access to the city. Chicago houses many regional offices for business and industry which made it possible to have broader representation of participants.

Guidelines and Instructions for Testimony

One of the two populations served by the East Central Network is composed of state education office personnel, university/college educators, and curriculum developers. The other group of patrons consists of business and industry groups, public school and postsecondary teachers, and organizations involved in the training of employees or people entering the work force.

Included in the guidelines and instructions for testimony were sample questions prepared for both populations. A more detailed reporting of the questions appears in Chapter II.

The East Central Network wanted to hear from anyone wishing to express opinions which would lend guidance for the future direction of the Center. Any individual or group supportive of vocational and technical education regardless if they were a teacher, teacher educator, or affiliated with business/industry was encouraged to be a participant by submitting oral, taped or written testimony.

Oral presentations were limited to 10 minutes. Individuals who registered with the Center in advance were assigned time slots for their testimony and others were scheduled on a first-come basis. The oral testimony was accompanied by a written statement which was included in the hearing record. Testimony was also accepted on a cassette tape accompanied by a written document. The proceedings contain the written testimony in its entirety and excerpts of the recorded testimony.

Many of the suggestions coming from the hearing and approved by the State Liaison Representatives will provide the basis for the future work of the Curriculum Network.

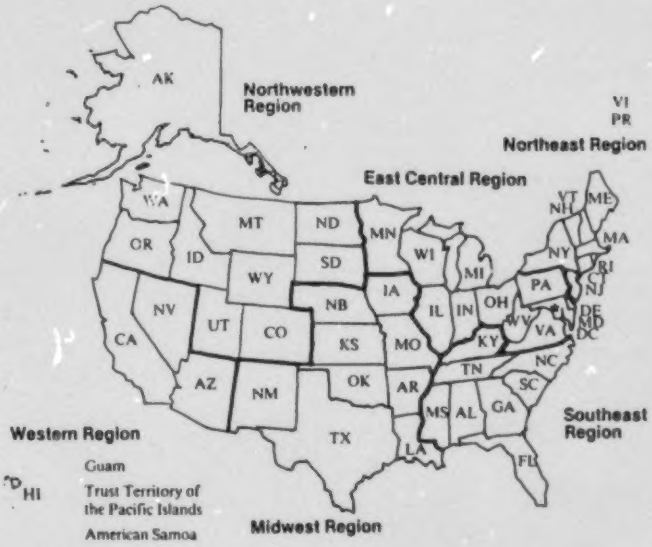
The U.S. Department of Education received this document and copies will also be sent to the other regional curriculum coordination centers and the American Vocational Association.

A flyer designed to advertise the hearing is in Appendix A. These flyers were disseminated to key people and organizations who in turn distributed them to others. The network system was utilized for the dissemination of the flyers.

National and Regional Organization

The East Central Network for Curriculum Coordination, comprised of 12 states, has its regional office on the campus of Sangamon State University in Springfield, Illinois. The network is one of six such curriculum networks and corresponding regions of states which make up the National Network for Curriculum Coordination in Vocational and Technical Education or NNCCVTE. The map on the following page depicts the regional composition for each of the six curriculum centers.

The national network's makeup is 57 State Liaison Representatives -- one in each state and trust territory. These Liaisons are the links in the network. They are typically people with curriculum development responsibilities in their state departments, although some are located in curriculum laboratories or centers. These representatives or SLRs are appointed by their state vocational director. Through these six centers and corresponding interstate networks, curriculum development products and services are shared throughout the nation.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MA
RI
CT
NJ
DE
MD
DC
Southeast Region
Western Region
HI
Guam
Trust Territory of the Pacific Islands
American Samoa
Midwest Region

The twelve states in the East Central region make the East Central Curriculum Network the largest of the six curriculum centers in number of states and population. Physical resources consisting of over 28,000 cataloged items include books, audiovisual materials and informational brochures. The Center makes these items available on a regional free loan basis. The staff includes searchers, researchers, and curriculum and information specialists.

The Network exists to provide services to meet the curriculum needs of people involved in vocational education and training. It has made many contributions to curriculum as it continues to meet its clients' needs. Examples of resource booklets include A Guide to Educational Equity in Vocational Programs and East Central Resource Guide to Energy and Energy Related Programs in Vocational Education. Other contributions are the development and acceptance of a standard curriculum format; a compilation of state profiles which identifies the practices regarding curriculum development and dissemination; and curriculum terminology, a working tool comprised of concepts critical to curriculum development and organized so that identical or similar word meanings and expressions have common counterparts. The ECN Task Listing Catalog, an extremely popular item with patrons, is one of the most comprehensive collections of task listings available.

The six regional curriculum centers are supported under Public Law 94-482, Educational Amendments of 1976, Vocational Education. Program Improvement Funds are available to the U.S. Assistant Secretary of Education under Subpart 2, Section 120 for research, development, and dissemination activities.

The funding cycle for the six centers is on a staggered time frame. The funding cycle for the East Central Network ended December, 1983, followed by a new three-year funding cycle beginning in January, 1984. The data gleaned from the scheduled hearing will assist the curriculum network administration in determining realistic and effective goals to guide 1984-1986 Network activities.

CHAPTER II

SUMMARY OF TESTIMONY

As a curriculum coordination/management network, it is the East Central Network's role to address the management needs of our State Liaison Representatives (SLRs) who are responsible for the decision-making in vocational curriculum development at the state level. Therefore the overall goal of the Network is to assist these curriculum development decision-makers in the management of their responsibilities by making available to them the most comprehensive, accurate information and materials available on issues of needs which are identified through the network.

The public hearing is one of the means chosen by the East Central Network Center for obtaining current information which would help the Center accomplish the overall goal. One of the major purposes for sponsoring the hearing was to help the Center determine the direction to best meet the needs of its clients which in turn would be most beneficial for the SLRs. The information from testimony is also helpful in accomplishing the four project objectives as stated in RFP 84-007 and which will be effective for FY 1984-1986. The four objectives are to:

- Increase availability of curriculum information and materials of priority significance to federal/state instructional program improvement personnel.
- Promote adoption and adaptation of curriculum materials developed with the assistance from federal and state vocational education funds.
- Minimize duplication in vocational education curriculum development.
- Improve the quality of vocational education curriculum and diffusion services provided to public and private schools and colleges.

To address this concern, i.e., to determine the best direction for the Center, overall questions were designed. It was suggested to interested testifiers that the questions be used as guidelines for developing testimony. The type of questions suggested were:

- Based on your past experience with the East Central Network what are the most effective strategies and activities for improving curriculum quality?
- What would make for the most productive relationship to disseminate curricula between East Central Network and other organizations regarding curriculum activities?
- What activities and client groups should the East Central Network concentrate on over the next several years?

- How can the delivery service by the East Central Network increase the effectiveness of training programs?
- Where do you go for curriculum development assistance?
- What type of technical assistance should be provided you by your state office or a network such as the East Central Network?
- What future do you see in curriculum and instruction for media? computers? What specific assistance would help you in your situation to meet these needs?
- On what key curriculum issues should the East Central Network focus its work?

Synthesis and analysis of the testimony lent itself to the collapsing of questions and categorizing the data under five categories. Summary statements of testimony submitted for the hearing are listed under one of the following categories:

*** Uniqueness of Center ***
*** Technical Assistance ***
*** Liaison and Networking Relationships ***
*** Quality and Effectiveness ***
*** Suggested Responsibilities and Projects ***

* Uniqueness of Center *

"The ECN recognizes that the 'bottom line' of curriculum coordination must be the fostering of capacity-building for vocational educators, particularly for teaching personnel in local education agencies."

"The Center can be utilized to disseminate and collect information in a highly efficient and effective manner."

"It has been very important to get information about trends in vocational curriculum development through the Network. The national searches have been most helpful as have all the efforts to define curriculum terminology...."

"The East Central Network, as the largest of the six Curriculum Centers, stands as an exemplification of the cooperative efforts of twelve states with good support by the State Directors of Vocational Education and the Illinois State Board of Education which houses the Center."

"The Center assists in eliminating narrow/parochial thinking on the part of the states by providing a method/means for out-of-state travel and the sharing of ideas."

"With school districts and agency resources being depleted, a central clearinghouse such as the ECN provides the answers to these dilemas. Why should schools and agencies duplicate efforts when the central organization can work as a coordinating vehicle for the entire state and region. It can research, compile, develop, and evaluate materials, techniques, programs, and resources. The results from these processes can then be disseminated. The East Central Curriculum Center is an efficient, cost effective organization...."

"The East Central Curriculum Network and the other Regional Networks with their coordinated efforts are the only nationally organized, regionally coordinated, and locally controlled vocational curriculum/instructional materials organization available in the United States."

"The services of the ECN have reached thousands of educators, counselors, and administrators--personnel working with kindergarten through adult populations and including personnel from special needs to the gifted and talented. The responses to the availability of materials, information, and technical assistance at no cost has resulted in extensive utilization of the East Central Curriculum Center."

"Besides curriculum matters there is a constant spill over in other vocational concerns...."

* Technical Assistance *

"The SLR is typically a very busy person within his/her agency, with the ECN function being only one of the items in his/her job description. Thus, it is extremely important that the ECN provides as much support as possible to the SLR in such areas as work program and marketing strategies; orientation to the ECN and the National Network (preferably within the state of each SLR); promoting procedures for ease of access of materials; and in maximizing ways in which the SLR can familiarize himself/herself with new materials. Any implementation and assisting strategies which can help the SLR be familiar with existing and new resources, as well as with their application within the state, will maximize utilization of ECN and National Network resources. The SLR needs to view Network-related duties as more than secondary in importance and with a 'real sense of ownership' as each state contributes time and effort beyond actual monetary resources toward common objectives. The increased use of technologies, including computerization of content, should assist in the SLR linkages."

"The ECN 'Task List Catalog' and 'Curriculum Terminology' as a tool are examples of good developments designed to meet the needs of people involved in vocational education and training. These products have been found helpful, generalizable and transportable."

"ECN needs to continue to...keep us informed and updated of any new CBVE materials which are developed by other states and obtain CBVE curriculum materials from other states which may be of use to vocational educators."

"I urge the ECNCC to take a proactive and futuristic role in helping vocational education teachers to be informed about the state-of-the-art technologies like video-teleconferencing and other emerging technological applications in

education....There is a need for teacher and counselors to be able to borrow computer software programs to decide if they want to purchase, adopt or adapt them to their local conditions; ECN can help."

"We are still in need of the professional help of the East Central Network in not only developing the detail of the curriculum, but working with us in an attempt to implement this curriculum."

"A coordinated effort, using the best expertise possible, is needed to identify the components of the core curriculum. Educators need help in analyzing the pros and cons of the 'two-plus-two' concept and they need help in strategic planning necessary to implement the articulated 'two-plus-two' concept between high school and post-secondary institutions."

"The implementation of inservice activities to facilitate the adoption of the curriculum format."

"The Center is a source of specific experts for specific project involvement...the electronic searches....are the most helpful."

"Few programs working at the community level or with special populations like limited English speaking students are aware of the Center...The (Center's) bilingual collection is limited...containing materials donated by the Bilingual Vocational Education Project rather than purchased by the Center. To meet its full potential more must be done to enhance the collection, to outreach to those serving Hispanics...."

* Liaison and Networking Relationships *

"The State Liaison Representatives (SLRs), appointed by their respective State Director of Vocational Education for participation in Network activities, stand as the key links in sharing curriculum development products and services. The capacity building potential of a state resides in the functioning of the SLR. The SLRs are the "connecting points" of the Network, assisted by the Regional Network Center and The National Network, providing leadership in marketing and work program development. The East Central Network recognizes the variety of governance and administrative patterns which exist among the twelve states of the East Central Region for the delivery of vocational education programs and services, as well as the variety of SLR appointments either within or beyond the state vocational education agencies."

"The Center can be utilized within a state as a position of strength to gain justification and acceptance of proposed projects or changes."

"The ECN promotes personal communications and provides a fast and effective means of problem solving when member states address common problems and challenges."

"The communication process that has evolved through the network is most valuable to maintaining relevant and up-to-date vocational training programs. At a point in time when agencies providing vocational-technical education must survive on a slim budget in the face of dramatic changes, if not a revolution in technology, the sharing of curricula and ideas is critical."

"This hearing is testimony that regional meetings have a very definite benefit for the individual states involved when it comes to networking. The interchange with the other people at the regional meetings from other states, all the spin-offs that occur from that, and the general contacts with people are some of the benefits. We find that we do not necessarily discuss only curriculum but a lot of curriculum related kinds of things."

"ECNCC is a vehicle that fosters professional and personal contacts between states regarding vocational curriculum concerns."

"The Network promotes the exchanging of information and materials nationally and regionally among educators."

"The Center provides a capacity for joint curriculum development projects."

"ECN is an excellent buffer between the state and federal programs."

"It can be the state's system to alert them of impending or pending agendas of which the states need to be aware."

"The Network could be a highly efficient and effective method to disseminate the results of all national research and development projects because the Network could assure that the materials could get into the appropriate hands at the state and local level."

"Network provides a sounding board or a forum for individual's ideas to be discussed and implemented."

"Another asset of having the network is the wonderful opportunity for the State Liaison Representatives to meet together, have group therapy and find that somebody else has the same kinds of problems that you do."

"The ECN should continue to publicize Network services and materials available to staff and administrators; continue to tie into national computer networks for sharing and retrieval of information; and carry on a closer relationship with state funded grantees requiring curriculum materials and services from the Network."

"Inform primary groups of vocational educators of all new CBVE materials which are obtained for loan. This can be done by informing newsletter editors of the different groups and by using a computer network throughout the state."

"Let every developer of vocational curriculum know that the East Central Network exists and the services it provides."

"Our SLRs' role in the network demonstrates that curriculum is and should be a high priority for educating today's youth for tomorrow's jobs. Developing linkages with other state centers through the Network allows us to adapt or adopt curriculum from other states, rather than duplication of effort."

"The East Central Network can be a liaison between the academic community, particularly the community college and the clinical facility, and can offer

continuing education programs, expert curriculum developing advice tailored to solve a particular problem, as well as seminars and workshops. This would enable individuals in smaller clinical facilities an opportunity to learn about expensive equipment available only in the larger facilities...Curricula can be developed under the auspices of the East Central Network that mirror the world of work; thus enabling individuals to perform in a meaningful fashion and enjoy the world of work."

"The Network can be utilized within a state as a position of strength to gain justification and acceptance of proposed projects for changes in state procedures."

"The mailing list for communiques from the Center could include special funded programs for Hispanics, refugees, migrants, limited English proficiency persons; bilingual and bilingual vocational teacher training programs; relevant resource centers and Hispanic and other minority related community based organizations."

* Quality and Effectiveness Factors *

"The effectiveness of the curriculum materials can easily be determined by setting up a system so the user of the materials can evaluate its effectiveness before returning the materials to the Center for recirculation. Though an opportunity now exists for reaction to materials, a computerized system would be more efficient to obtain such data. This would also help the Center to identify resources of high quality, would be a means of being more selective of resources and lead to better utilization of storage space. The transportability of resources through a computerized system would strengthen the networking concept therefore reaching more people with services and materials."

"The Center can provide standards and criteria for curriculum development."

"Additional sets of the bulky CBVE student learning guides should be added to the system so the waiting period can be reduced for those who request loan sets of the materials."

"As far as we are concerned, networking is essential because all the talk aside, the bottom line is that if we didn't network we couldn't afford to develop curriculum...There is no alternative...states cannot afford quality updated curriculum unless there is some kind of networking system that lets us have access to what other states are doing."

"ECN provides standards and criteria for curriculum development."

"The Center provides a fast and effective means of problem solving when member states address common problems and challenges."

"Communication that goes to local administration needs to be attractive, eye-catching and give them some incentives to be sure they get into the right hands and not buried in a newsletter some place."

"Some amount of quality control by the ECN in determining the usefulness of a curriculum devlopment to be disseminated will also continue to be helpful to the SLRs in their states. At the same time, the many diverse needs of the ECN Region need to be recognized."

"A process should be developed to insure that any curriculum materials that are disseminated to local schools be of the very highest quality so that they warrant the time and cost expended to disseminate them and warrant the time expended by the local district to send staff members to learn how to use these materials."

"Strategies for sharing new local curriculum developments with the Network via each state probably need further consideration. 'Show and tell' is still one of the best and most cost-effective types of inservicing activities available. The SLR is, again, the key to making this happen within a state."

"One item which would be of immense value is an UPDATED bibliography of existing curricula, reference materials and AV aids. Inclusion of the same type of materials from industrial training settings should be included. Since the great amount of time and money required to collect such a resource limits the frequency with which such publications can be printed, I suggest such efforts be available on a microcomputer floppy disk to ease duplication costs and periodic updating."

"Today more than ever before, because of limited funds, decentralization and the need to network with other agencies is a must. Michigan was invited to present their computerized loan system at the National Network Conference in Oklahoma last July. It was not our presentation that made us more informed when we returned to Michigan, but what was shared with us by other states and territories that made our exchange network so rich in resources, i.e. human, print, and audio-visual curriculum materials."

"As a state center, the Michigan Career Education and Vocational Education Resource Center relies strongly on the network for services in curriculum development and dissemination. These services would be time consuming and virtually impossible to perform alone as a state center. For example, by establishing a link with the East Central Curriculum Network, our outreach capacity has increased considerably in the area of data based searches, requests for fugitive materials and task lists."

"Promotes cost effectiveness when states utilize the system of locating and acquiring materials for adoption or adaptation rather than new curriculum development."

* Suggested Responsibilities and Projects *

"Develop a faster and more efficient information retrieval system so teachers can access state-of-the-art curriculum materials on a daily basis via a computer hook-up."

"Increase the awareness of services that are available and expand these services to include the latest state-of-the-art by initiating communication within and between states by establishing and enforcing a reporting system."

"A system needs to be developed that will insure that good quality materials are put into the hands of instructional staff who need to use them...a way of insuring, that would be to provide incentives for districts to send instructional staff members to local workshops or dissemination activities."

"A curriculum personnel resource file would provide a listing of personnel and vocational systems in each of the states that could serve as in-service resources and model sites for the improvement of curriculum development and systematic delivery of instructional materials. By completion of the activities of determining needs and identifying the best in-service deliverers a functional network contract can effectively serve its membership."

"Know key persons and agencies serving minority populations in the areas of career education and counseling, vocational training, adult education, English as a Second Language (ESL) and employment."

"A policy needs to be developed that will keep the collection timely. It appears that not all states are making copies of their materials available to the ECN. Perhaps this is a cost factor to the supplying agencies. Whatever the reason, this is a factor that needs attention."

"The Center can promote/showcase exemplary programs and practices in the area of curriculum."

"ECN can coordinate the development of competency based curriculum established upon incumbent worker validated content. Coordination would be needed to avoid duplication in new curriculum development or revision of content, delivery or evaluation processes. Vocational curriculum would have a single set of vocational guides available for adaptation or adoption by states or local education agencies. Regional curriculum centers would be responsible for dissemination and utilization activities. For dissemination of good quality curriculum materials to instructional staff, we should be considering some alternative means such as providing workshops for teachers after school, on weekends. If that isn't possible, shorter meetings, localized, so that teachers would only have to be out of their classrooms for perhaps half a day as opposed to an entire day or several days would be preferable."

"The ECN can put together national programs of national priority topics and items for workshops and seminars for member states; provide monies for technical assistance for member states; and, provide quarterly (or more frequent) communique with curriculum information for member states to integrate or utilize into their curriculum dissemination system."

"I would suggest that the most responsible thing or avenue the Center should pursue in its plans for future endeavor is to emphasize its strengths, build upon that solid base of client support and expand cautiously into new ventures. If bold new program activities are undertaken without definite assurance of adequate resources, an erosion of current program quality will occur. In short, I would say that the Curriculum Center is headed in the right direction. Stay with that direction and thrust and continue to build a stasified clientele. You are doing some things now in CAI - and that's excellent - continue those efforts and if other resources become available that is the area which has perhaps the greatest curriculum need."

"Provide timely high-technology for the post-secondary and adult level for the common complaint is that vocational education is at the secondary level. To facilitate this, increase the resource staff."

"One of the primary things we have to work on in terms of the network is the consolidation and development of basic skills materials."

"ECN and SLRs need to determine some kind of system that almost comes automatic as far as updating of curriculum is concerned; work with the cluster concept and streamline the CBE design of materials."

"There is a need not only for an identification of articulation from secondary to postsecondary but all the way from elementary. Another possibility I see is identification of evaluation of criteria for curriculum materials nationally. Base considerations include CBE criteria and reference measures, objectives, and the right format."

"We encourage the ECNCC to pursue its efforts in needs assessment in curricula and develop curriculum with explicit emphasis on transportability so that the investment is optimized. The software evaluation unit could be strengthened and enhanced. We support the development of curricula in the high tech areas and an enhanced effort in publication, dissemination, and software acquisition."

"Assist in formulating new priorities on funding—not the same old ones. Assist in development of curriculum based upon "outcome goals" to varying time frames (open entry-open exit). Assist in developing a statewide credentialing system with new definitions. Creation of a realistic program to assist all those now caught in the middle of the traditional elementary and secondary system and the higher education system, i.e. new curriculum for non-traditional systems. Need new lines of communication with business/industry and new vocational training agencies. Need basic skills, i.e. math in vocational education."

"The faster curriculum changes occur or need to occur, the more imperative it is not to have to throw away cars when the tires are worn out. Commercial companies benefit by obsolescence because they are motivated by profit. The Center has a definite role in being able to be motivated by needs instead of being motivated by profit. The profit motive of commercial vendors needs to be thoroughly examined for its positive and negative impact upon not only what is being taught, but how it is being taught. This issue will become more and more important as technology is applied to the teaching/learning processes."

"A greater emphasis is being placed upon the blending of academics and employment-related skills. This kind of effort will require the active support for curriculum development and curriculum dissemination. The ECNCC can provide help in this area. There is a growing acceptance for curriculum changes that prepare high school youth with the generic skills and knowledge they need for proactive self-management and other skills that are generalizable across occupational areas."

"Urge the organization of states to support the development of meta-models that synthesize value analysis and competency modeling. This process goes beyond passive mirroring of static job descriptions. This effort is inherently beneficial to the sponsoring employer by increasing production, job satisfaction, and organizational renewel. Innovations are needed in the processes of monitoring and documenting the knowledge and skills workers need."

"Problem is the construction of curricula that satisfies the requirement of the appropriate outside accreditation agency and at the same time fit into the established structure of the college system."

"Develop state 'model' task lists to facilitate the movement to CBVE."

"Promote the development and loan of more audio-visual materials especially for teacher education and for the specific occupational and technical areas."

"Identify and maintain an updated list of model CBVE schools in other states."

"Integrate competency modeling, value analysis and job redesign into a dynamic process somewhat similar to the concept of quality circles that would be of descriptive information that could be utilized by educators."

"The reauthorization of the Vocational Education Act of 1963, to be accomplished by September, 1984, will need to include considerations of curriculum coordination and networking within its scope. Perhaps one of the most useful activities that might happen in the year ahead would be an impact assessment of a regional network, such as the ECN, in terms of its relationship to the National Network and to its capacity to assist State Liaison Representatives."

"Curriculum coordination in vocational education continues to be a major force toward the articulation of vocational education: secondary, postsecondary and adult."

"Have each state develop a directory listing every type of vocational curriculum source located in that state and include information about availability of curriculum for other interested individuals or institutions. Listing of occupational competency tests and entrance standards assessment tests available for purchase. Collect data from employers that represent occupational clusters which would identify standards of excellence for each specific occupational cluster. Example: What does the construction industry and its unions identify as skills that reflect excellence in an employee?"

"A needs assessment of the local vocational program curriculum resource needs should be conducted in the participating states to provide an inventory of curriculum resource. The means by which a needs assessment instrument could be developed and implemented would be through the combined efforts of the State Liaison Representatives (SLRs) and the CCC staff."

"To assist in the utilization of the inventoried information, a small grants program could be initiated by the CCC. The establishment of the small grants program by the CCC would make seed money available to the states for the purpose of development or adaptation of curriculum and for assistance in curriculum inservice activities."

"I would like to see the curriculum and reference materials, including slide/tape support materials, developed. (If some of these already exist, I am unaware of them.)"

"Need to put together national programs based upon the national priority topics for the member states."

"Provide monies for the technical assistance for member states."

"Provide quarterly, or more frequent if necessary, communiques with curriculum information to the member states so that the member states could integrate or utilize this information into their curriculum and dissemination system."

"With the continuing changes of technology occurring in this country, I believe it is important that the Network as well as educational institutions become involved in utilizing the microcomputer as an instructional tool."

"We see that there are great needs in software evaluation and development, great needs in hardware selection and employment, further needs in organizing for this new partner and a large gap in understanding the potential of computer assisted instruction and computer managed instruction. What I am suggesting is that these are areas of common need, since most schools now have microcomputers. I would welcome the sight of you taking a leadership role as you have done with evaluation, research, diffusion, regional cooperatives and instructional design. Sound educational uses of the microcomputers in the vocational-technical programs will 'spill over' to other areas of the curricuum of our schools."

"The Center should computerize the following data banks for the different occupational clusters: task lists, performance objectives, written exams and product/performance checklists... set up and develop a statewide model computer management information system. This system is necessary to facilitate the implementation of CBVE in Illinois. Perhaps this system could be made available to schools on diskettes and user documentation manuals."

"If we could discover a way in a combination of hard copy and micros that would enable the network to do more central dissemination for us where we have these printing problems."

"Develop a bibliography identifying diskettes and user documentation manuals available for institutions searching for instructional materials available for use on a microcomputer...continue to promote the use of microcomputers in communicating bibliography lists, task lists, learning guides, etc., to various schools in the state...promote the development of a statewide model for a microcomputer managed instructional system for competency-based instruction."

CHAPTER III

RECOMMENDATIONS

The East Central Curriculum Coordination Center, since it began operation in Illinois in 1972, has become the largest vocational education resource center in the nation. The Center's qualified staff has established the Center's national reputation of offering quality, efficient and friendly service.

The East Central Network expects to continue its smooth operation of dissemination of materials which has become routinized within most East Central states. But, due to the complexity of state's needs, the ECN sees new responsibilities emerging. This is based on the premise that the SLRs' role and decisions are relating more to curriculum management, design, development coalitions and applications.

The new responsiblities include the ECN staff be current with uses of new technology in curriculum development; abreast of innovative design for streamlining the curriculum updating process; and successful in incorporating technology into the library dissemination system which will expedite the updating of resources and the acquisition of information requested by clients. It also means the ECN assumes leadership responsibilities for identifying, establishing and implementing criteria, standards, and/or policy, which will generate quality curricula.

The Center's staff felt that identification of vocational curriculum needs of the clients and potential clients of the Center was essential for determining the value of ongoing activities and services of the Center. Once the value has been established, decisions can be made to delete some activities/services and determine new ones to assume.

The public hearing **Future Curriculum Development Needs in Vocational Education and Training** enabled the East Central Network staff to collect data from testimony. The data reflects testimony delivered by 31 individuals. A breakdown of professions represented by the testifiers include university students, professors, instructors (secondary and postsecondary), industry/business, career guidance, project director, professional organizations and state department positions. The testifiers represented the states of Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Virginia and Wisconsin.

Recommendations, Justifications and Recommended Action

The following recommendations are suggested for the East Central Network. These recommendations are based on the content from testimony submitted for the hearing. Justification, also based on testimony, follows each recommendation. The recommended action consists of suggestions gleaned from the testimony which would help the staff at the East Central Curriculum Center offer the type of service the clients are requesting.

RECOMMENDATION **Seek federal funding for the support of the East Central Network Center concept.**

Justification: ECN is the only national/regional organization functioning to disseminate curriculum resources representing all areas of vocational education, whose services reach thousands of people.

ECN efficiently and effectively collects and disseminates curriculum information thus minimizing duplication efforts resulting in cost savings for state(s).

ECN is a source of information about vocational curriculum trends and other vocational concerns which assists in minimizing narrow-tunneled vision, thinking and decision making.

Recommended Action: Respond to national RFP which is specifically designed for the regional curriculum center by submitting a proposal of highest quality.

Submit proposals to RFPs issued by private and public agencies at the national and state levels.

*****

RECOMMENDATION: **Expand the on-going services provided by the East Central Network.**

Justification: Availability of updated and new curriculum resources representing the 12 state region and five regional curriculum centers.

Offering of supportive staff and activities to facilitate curriculum design/implementation and joint curriculum projects.

Professional development and opportunity for idea exchange and problem-solving for SLRs through regional meetings.

Inservice activities for college classes and local education adminsistrators (LEAs).

Recommended Action: Design an inservice program which can be delivered as a workshop, audio-visual presentation, teleconference, or satellite meeting which a) identifies the services of the center, b) explains accessing the resources, and c) provides the state-of-the-art curriculum for people involved in curriculum affairs.

Design the network system so that information reaches all curriculum involved people including those who implement curriculum in the classroom or training site.

RECOMMENDATION: **Build more effective liaison and networking relations.**

Justification:

Liaison and networking relationships provide means for problem solving, contribute to maintaining/updating vocational training programs, foster intra-state personal contacts and allow adoption or adaptation of curriculum.

The ECN provides the SLRs, a vital link to the network system, opportunities in the sharing of curriculum development products and services; in the interchange of information/ideas and spinoffs that occur from that with other people; in maintaining curriculum as a high priority; and in assessment and evaluation of national curriculum concerns which enables the SLR to provide leadership in marketing and work program devlopment.

The ECN is and can be used as a position of strength for justification/acceptance of proposed changes, as a buffer between state and federal programs, as an alert system for agendas of concern to states and as headquarters for the dissemination of all national research and development projects.

The ECN needs to let every developer and user of vocational curriculum know of its existence and the services provided through the continued use of newsletters and other effective means of communication.

Recommended Action:

Establish contact with state funded grantees of curriculum oriented projects.

Obtain regional 800 telephone number for the Center which would provide easier access to the Center and provide quicker assistance to the Center's clients.

Design communiques which are eye-catching for specific target populations such as local administrators.

Design in-service workshops tailored for specific groupings of organizations such as educational community, business community and accreditating agency, which will assist in the designing, modification and implementation of curriculum.

Structure regional meetings which promote formal and informal interchange with other people to maximize ways in which SLRs can become familiar with curriculum and curriculum-related areas and minimize narrow and parochial thinking.

Develop an advertising campaign to reach the vocational education population and inform them of the services available through the National Network for Curriculum Coordination in Vocational and Technical Education.

RECOMMENDATION: **Incorporate those aspects which will increase the quality and effectiveness of the present East Central Network operation.**

Justification: Continue services but with the latest and most up-to-date resources expanded to include names of available specialists, microcomputer hardware and software information, and audio-visual curriculum materials.

Develop quality control to insure disseminated curriculum is of highest quality to include provision of curriculum development standards and criteria.

Develop a broader evaluation system for clients' usage.

Additional acquisition of the more popular resources and quicker and more attractive means for informing and disseminating resources.

Linguistically and culturally appropriate curriculum resources are especially crucial to serving the Hispanic (and other minority) populations.

Recommended Action: Design a computer packet to include state-of-the-art technologies, explanation of a computerized library system, description and membership with national computer networks, software evaluation and review.

Expand the bibliographies to include visual aids.

Design a means of assessing curriculum materials to identify high quality resources.

Publish a competency based packet which includes new CBVE materials, model CBVE schools in the 12 states, directory listing vocational curriculum located throughout region to include availability of curriculum, and a listing of personnel and vocational systems that could serve as in-service resources and model sites.

Organize and implement an evaluation process which identifies quality curriculum, would be applicable to the 12 state region, and would incorporate means for user reaction to curriculum.

Formalize a process whereby federally produced resources which focus on minority populations and their unique problems (such as language) are automatically placed in regional curriculum centers.

Focus on recommendations and evaluations of materials designed for minority populations.

RECOMMENDATION: **Acquire federal and state approval and monetary support to implement clients' suggestions which would meet curriculum needs throughout the East Central Network.**

Justification:

Develop a faster and more efficient information retrieval system to include state-of-the-arts, automatic updating, and computerization with available floppy disks as a source of information.

Develop and implement incentive devices to assure implementation of curriculum.

Establish a curriculum resource file to include curriculum personnel, exemplary programs, national programs focusing on national priority topics, "model" task lists, model CBVE schools/programs, and a listing of every type of vocational curriculum source in individual states.

Develop means for all states in the region to share copies of curriculum with the Center.

Assist in the areas of regional concern such as articulation, new priorities for funding, curriculum development for non-traditional programs, basic skills in vocational education, monitoring and documenting the knowledge and skills workers need, computerized systems.

Recommended Action:

Emphasize to the state and federal authorities the need for a complete computerized East Central Curriculum Center operation. The system would meet the needs of the clients as evidenced by the testimony. The computerized system would provide a) quicker service, b) more information, c) assessment information, d) resource files on competency based education such as exemplary programs, personnel, sites and e) curriculum components such as task lists and assessment instruments.

Explore and design incentive means for curriculum implementation.

Campaign for the need of total curriculum sharing by all states in the East Central Curriculum Region.

CHAPTER IV

EVALUATION

According to Raizen and Rossi[1] "a frequently voiced statement about evaluation is that evaluation findings are rarely used." It is hoped the audiences for which the Proceedings is designed will be affected by [illegible] content and will be influential in generating the implementation of some--if not all--of the suggestions identified in the testimony. The major audiences for which this document is designed include the current and potential clients of the East Central Curriculum Center, personnel affiliated with each of the six regional curriculum centers, and people in key positions who are influential in decision making relating to a) funding of the Center and b) approving new projects, activities, and resources for the Center.

Evaluation, an essential component of any activity, project, system or unit of organization, is a means of determining success and improvements needed. Though the East Central Network is involved in on-going evaluation of its organization, a need existed to evaluate the process of the public hearing **Future Curriculum Development Needs in Vocational Education and Training,** to confirm that evidence existed to support the Center, to identify a major common concern expressed in the testimony, to identify the resources needed to implement suggested changes, and to relate to the transitions occurring in the area of accountability.

Assessment of Hearing Process

The assessment instrument designed for the hearing focused on three areas: organization, representation, and value. Each individual participating at the hearing was requested to respond to the evaluation form and to return the form before leaving the hearing. Of the 18 participants who gave oral testimony, 10 evaluations were usable. A Likert-type scale with a value range of 4 (Excellent) to 1 (Poor) was used to assess the main and sub categories. An evaluation form is in Appendix B.

The overall mean for each of the main categories was:

Organization	$\overline{X} = 3.4$
Representation	$\overline{X} = 3.0$
Value	$\overline{X} = 3.5$

The overall mean for each sub-category of the three main categories is identified in Appendix B. With a possible overall $\overline{X}$ of 4.0, the basic analysis is indicative that the organization, representation and value of the hearing was above average, ranging from good to excellent.

The date of the hearing, Oct. 26, 1983, was correlated with the Fall Regional SLR Meeting. This enabled the SLRs to attend the hearing and also give testimony if they so chose. The Chicago site provided for better geographical representation since Chicago is the location of many regionally based businesses and industries and the transportation systems offered easy access to the city. The expense involved in sponsoring the hearing was kept to a minimum because of dovetailing the hearing, fall meeting and location of site. Because of their concern for vocational education, individuals were willing to pay personal expenses to testify at the hearing.

Evidence of Support

The public hearing is evidence that people are concerned about the future of the East Central Curriculum Center and curriculum related matters. Why else would the individuals give of their own time, money, and effort to supply testimony. The evidence contained in the Proceedings supports:

- The concept of the regional vocational curriculum center.
- The importance of the East Central Curriculum Center.
- The value of present services offered by the East Central Curriculum Center.
- The total sharing of curriculum resources among the six regional centers.
- The need for continuing present services but to expand and implement new services.

The East Central Curriculum Center has received funding to continue operating through FY 1986 at which time a new RFP will be issued. The funding is indicative of the value of the concept of regional vocational curriculum centers, the importance of the East Central Curriculum Center, and the value of the present services offered by the East Central Curriculum Center.

Major Concern

A major concern expressed by the participants at the Hearing is the lack of **sharing** of resources by states within the East Central Region and by the other regional centers. "The concept of a National Network for Curriculum Coordination in Vocational and Technical Education emerged from the recognition that curriculum development and dissemination efforts were often fragmented and duplicative, and the assumption that coordinated curriculum management is essential to improved educational effectiveness."[2] Of the original goals which are still maintained by the Network, two goals emphasize the **sharing** concept. They are:

- To provide a mechanism for the sharing of information on curriculum materials available and under development.
- To coordinate activities in the curriculum development, dissemination, and utilization with the aim of avoiding unwarranted duplications, enhancing quality of effort, increasing the transportability of curriculum materials, and improving their acceptance and use.

The sharing of curricula has allowed "many states with limited curriculum development resources to adapt Network-identified materials from other states. This procedure has been increasingly beneficial...."[2]

The East Central Curriculum Center's staff believes strongly in the sharing philosophy. However, the staff can only encourage that others share. At this time it is wise to remember that "the strength of the National Network is in the uniqueness of its cooperative structure...and the key to successful networking has been the State Liaison Representative."[2] The NNCCVTE Director's Council and the U.S. Department of Education can play a major role in evaluating the present status of sharing by states and regional curriculum centers.

The present funding and guidelines for the East Central Curriculum Center allow the continuation of present services, reinstatement of a quarterly newsletter, and some provision for new activities. The staff appreciates the opportunity to serve the clients and promote the goals of the regional curriculum center.

Resources for Implementation of Change

According to Feldman,[3] "there's a tendency for the world to change faster than our perceptions of it...so today's policies often deal with yesterday's realities." The East Central Curriculum Center's staff is very concerned about changes which are necessary to handle the requirements of the "information" society. The changes would require resources that would enable the expansion of a dissemination system which would get information immediately to curriculum concerned people. The clients and the Center are utilizing a dissemination system that hovers on the brink of antiquity if it is to meet tomorrow's curriculum needs.

To continue the quality, efficient service the East Central Curriculum Center is known for and to implement the suggestions made from the testimony, the staff would like to pursue the following:

- Purchase a satellite dish which would facilitate conferencing, inservice and allow the Center to serve as a demonstration site for satellite installation capabilities and expand computerization of the Center's information by automating circulation through use of a system such as CLSI.

- Costs to states for accessing electronic information should be borne through the Center's contract (e.g. 800 telephone number, telenet computer network).

- Joint or regional curriculum development should be initiated, and supported by Center funding, to address critical regional curriculum needs.

- Research on instructional issues that bear on the delivery of curriculum content should be the charge of the Center to provide a "flow" and complimentary set of information along with curriculum development.

- Participating states should be required to share curriculum materials as part of their role in the curriculum network.

To implement the above requires money and a firm commitment to the future. Instead of diverting attention to responding to other RFPs, which would take away time for providing quality service to its clients, the staff hopes the decision makers involved with the budget concerns of the regional curriculum centers will display the foresight and wisdom to make available funds for the expansion of a dissemination system which will meet the needs of the Information Society. Either a longer (5 years or more) contractual period or selection of CCCs on a non-competitive basis is recommended.

Accountability

The importance of evaluation concerning the dissemination system and quality resources was cited in specific testimony:

> "Though an opportunity now exists for reaction to resources, a computerized system would be more efficient to obtain such data; should help the Center to identify resources of high quality; would strengthen the networking concept through transportability of resources; and would be a means of being more selective of resources leading to better utilization of storage space." (Barbara Bush)

The fast pace of technology and its effect on curriculum related issues, especially the ever increasing amount of information, causes individuals to seek quality curriculum useable for their individual professional needs. The need for curriculum overshadows the source of curriculum. Though evaluation is essential and the Center must be accountable, a better perspective is expressed in this piece of testimony:

> "I think it is too much to expect that every person who receives or uses a product from a resource center or some kind of networking system is suppose to know what the network is all about or how it functions and so forth...that is something we have to keep in mind in terms of evaluating the services and products that we deal with through the networking system." (Ed Cory)

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1. Raizen, Senta A. and Rossi, Peter H., (Eds.) Program Evaluation in Education: When? How? To What Ends?, National Academy Press, Washington, D.C. 1981, p. 97.

2. 10th Annual Report of the National Network for Curriculum Coordination in Vocational-Technical Education, East Central Curriculum Center, Springfield, IL 1982, p. 2, 4, 3.

3. Swanson, Gordon I. (Ed.) The Future of Vocational Education. Feldman, Marvin "Looking Ahead: A Matter of Necessity." AVA, Arlington, VA 1981. p. 35.

CHAPTER V

TESTIMONY

The public hearing **Future Curriculum Needs in Vocational Education and Training**, co-sponsored by the East Central Network Curriculum Center and the U.S. Department of Education Region V, included oral, recorded cassette tapes, and written testimony. In most cases, those who gave oral testimony also submitted a written document. Individuals wanting to testify but could not attend the hearing submitted either cassette tape or written testimony.

Testifiers

The participants are listed according to state. Each participant is identified by name, professional position, and city.

Illinois

Tom Boldrey, Kinetic Systems Corporation, Lockport

Barbara Bush, Undergraduate Student, Home Economics Education, Illinois State University, Normal

Eileen Falls, Undergraduate Student, Home Economics Education, Illinois State University, Normal

Richard W. Glogovsky, Assistant Director, Lake County Area Vocational Center, Grayslake

Norman G. Laws, Professor of Education, Chicago State University, Chicago

Jeanne Lopez-Valadez, President, Hispanics in Vocational Education, Arlington Heights

Jim Naylor, Vocational Director, Lockport Township High School, Lockport

Urban T. Oen, Project Director, Illinois Competency Based Vocational Education Project, Grayslake

Jack Pfeiffer, Director, Lawrence Adult Center, Springfield

Merrill Redemer, Associate Professor of Administration, Sangamon State University, Springfield

Charles Schickner, SLR and Research and Development, State Department of Adult, Vocational and Technical Education, Springfield

Michelle M. Sibigtroth, Director, Region II Career Guidance Center, Rockford

Ronald W. Stadt, Professor of Vocational Education Studies, Southern Illinois University, Carbondale

Judge Watkins, Associate Professor and Medical Laboratory Technology Director, Malcolm X College, Chicago

Indiana

Andrew M. Adaska, Area Vocational Director, School City of Hammond, Hammond

C. Edward Brown, SLR and State Coordinator for Supportive Services and Program Improvement, Indianapolis

Clyde V. Colgrove, Director of Instruction-Student Affairs, Indiana Vocational Technical College, Hammond

Michigan

Ed Cory, SLR and Michigan Department of Education, Lansing

Gloria Kielbaso, Coordinator, Michigan Vocational Education Resource Center, East Lansing

Betty Leavitt, President-Elect, Michigan Vocational Curriculum Leaders, Marysville

Howard Napp, Program Manager Instructional Services, Kent Skills Center, Grand Rapids

Minnesota

Fred C. McCormick, President, Educational Operations Concepts, Inc., St. Paul

Missouri

Roy Bohn, Instructor, Four Rivers Area Vocational-Technical School, Washington

Ohio

Tom Hindes, Business and Industrial Training and Development Coordinator, Ohio State University, Columbus

Darrell Parks, State Vocational Director; Robert Balthaser, RCU; Joyce Keefer, Acting SLR; Tom Hindes, The Ohio State University Business and Industry Consultant; State Department of Education, Columbus (Position Paper)

Pennsylvania

Vernon Register, SLR and Vocational Education Program Support Services, State Department of Education, Harrisburg

Thomas J. Walker, Associate Professor and Director of Instructional Programs, Center for Vocational Personnel Preparation, Indiana

Virginia

Kay Brown, SLR and Curriculum Specialist, State Department of Education, Richmond

Wisconsin

Lou Chinnaswamy, SLR and Board of Vocational, Technical and Adult Education, Madison

Spiro Mehail, Milwaukee Technical College, Milwaukee

Kenneth H. Mills, Director of Instructional Services and Research and Planning Services, Gateway Technical Institute, Kenosha

Testimony

The testimony presented on the following pages is for the most part verbatim. Some of the testimony has been reproduced as it was submitted; some has been retyped to conserve space; and in a few cases where a written document was not received, the testimony was transcribed from tapes. Lou Chinnaswamy gave oral testimony at the hearing. Because of a poor quality tape and because there is no written document, his testimony is not included in this publication.

Industry Based Education and Training Program

Sponsored by: KineticSystems Corporation, Lockport Township High School District 205 and the Illinois State Board of Education, Department of Adult, Vocational and Technical Education.

Dr. Tom Boldrey
KineticSystems Corporation
11 Maryknoll Drive
Lockport, Illinois 60441
(815) 838-0005

26, October 1983

Testimony to the U.S. Department of Education Region V Office.

May I begin by extending my here-to-fore unexpressed compliments to the staff of ECNCC. I would imagine that your job is rather thankless. If you hear from people, it is probably because of problems. Without exception, I have always received prompt, personalized, professional and resourceful service to my inquiries and requests. My only frustration is the busy signal I get from busy phones.

This hearing could not be more timely. The issues of curriculum change are central to both the problems of vocational education as well as the positive potential vocational education possesses. The so-called "high tech" crisis is a blessing in disguise. We are in the beginning phases of an unparalleled opportunity in vocational education because of the national attention focused upon education and the growing acceptance by educators of the need for change. The ECNCC has a concomitant unprecedented opportunity to serve the urgent needs of vocational educators at the secondary and post-secondary level.

I. If the "two-plus-two" concept of preparing people for high technology occupations is going to be implemented very widely, it will require the rallying of resources to accomplish this goal. On the surface, the concept is simple but the implications for major curriculum change for the comprehensive high school are staggering. Local school districts cannot support these changes by themselves and even if they could it would not be a wise expenditure of resources.

II. A coordinated effort, using the best expertise possible, is needed to identify the components of the core curriculum. Educators need help in analyzing the pros and cons of the "two-plus-two" concept and they need help in strategic planning necessary to implement the articulated "two-plus-two" concept between high school and post-secondary institutions.

III. The Illinois State Board of Education recently accepted the recommendations of the Employment Education Policy Study. I quote from this study: "a distinct academic, general or vocational curriculum in schools is no longer valid". A greater emphasis is being placed upon the blending of academics and employment-related skills. This kind of effort will require the active support for curriculum development and curriculum dissemination. The ECNCC can provide help in this area. There is a growing acceptance for curriculum changes that prepare high school youth with the generic skills and knowledge they need for proactive self-management and other skills that are generalizable across occupational areas.

IV. As a vocational educator, I am embarrassed to find such a small amount of curriculum that has a verifiable direct relationship to the knowledge and skills workers need in order to be optimumly productive. If vocational education had to rely only upon commercially developed and published materials, I am convinced the problems would be even greater. One of the common problems of most good vocational teachers is the same kind of problem I faced as a classroom teacher in the 1960's and also at the university level in the 1980's. Selecting textbooks and curriculum packages for courses is based upon choosing the lesser of the evils. It is like having to buy a car when all you want are the four tires. There is usually only a small portion of what you buy that matches your needs well. Think of the possibility of being able to mix and match from several sources. The faster curriculum changes occur or need to occur, the more imperative it is not to have to throw away cars when the tires are worn out. Commercial companies benefit by obsolence because they are motivated by profit. The center has a definite role in being able to be motivated by needs instead of being motivated by profit. The profit motive of commercial vendors needs to be thoroughly examined for it's positive and negative impact upon not only what is being taught, but how it is being taught. This issue will become more and more important as technology is applied to the teaching/learning processes.

V. I feel the time pressures for this presentation just as most good vocational educators are feeling the time pressures. Vocational education is facing unprecedented pressures to change not only what is being taught but how it is taught. How to use advanced technology in the teaching/learning process is becoming a major concern. I urge the ECNCC to take a proactive and futuristic role in helping vocational education teachers to be informed about the state-of-the-art technologies like video-teleconferencing and other emerging technological applications in education.

There is even a need for teacher and counselors to be able to borrow computer software programs to decide if they want to purchase, adopt or adapt them to their local conditions.

VI. Vocational education has historically been a key ingredient to the economic health of our nation. Vocational education has been a vital component in preparing people for working. Recently, vocational education has lagged behind in it's ability to keep pace with changes taking place in the workplace. Not enough effort has been placed on the processes for identifying new and emerging occupations. Not enough effort has been placed on the processes of monitoring and documenting what workers need to know and be able to do to be productive employees. This fundamental first step is the most vulnerable aspect of vocational education. Most of the traditional approaches to task analysis are not cost effective nor are they fast enough. Gordon Dveirin and I have proposed a "win-win" approach be developed that benefits employers and benefits the providers of employment education and training. Our suggestion is to integrate competency modeling, value analysis and job redesign into a dynamic process somewhat similar to the concept of quality circles that would spin-off descriptive information that could be utilized by educators. Time does not permit elaboration of this idea here, but I would be glad to respond to inquiries.

However, I would like to urge the organization of states to support the development of meta-models that synthesize value analysis and competency modeling. This process goes beyond passive mirroring of static job discriptions. This effort is inherently beneficial to the sponsoring employer by increasing production, job satisfaction, and organizational renewal. Innovations are needed in the processes of monitoring and documenting the knowledge and skills workers need.

Chairperson, Members of the Committee:

I am Barbara Bush, a student at Illinois State University. I am currently completing my Bachelor of Science degree in Home Economics Education. It was during enrollment in one of my courses that I had the opportunity to visit the East Central Curriculum Center in Springfield. Through this visit I became familiar with the services and materials offered to teachers of vocational and technical subjects. I was also able to utilize a variety of the materials available at the Center during my student teaching experience. They proved to be very helpful and of excellent quality. Because of this, I think the Curriculum Center is a great asset to teachers.

I speak for myself, expressing my concern for the need of good educational resources. I am aware of the large course loads teachers are forced to carry and the extra demands on their time. Their need for assistance in curriculum development and materials which are easily accessible and ready to use is greater today than ever before. I foresee that the demand will become even greater in the future because of the technological changes and the increase of new information.

Although the Curriculum Center has been fulfilling these needs, as well as several others, the Center should continue to meet the needs of teachers so they in turn, will have time for their students. In order for the Curriculum Center to determine these needs, monies should be made available to establish and maintain a system for determining curriculum needs in vocational and technical education; to coordinate activities in curriculum dissemination and utilization; to increase the effectiveness of curriculum materials; and to enhance their transportability.

The way to establish and maintain such a system to coordinate activities in curriculum development, dissemination and utilization would be to develop a complete computerized library system. This system would keep the material listings up-to-date and current; allow other networks to promote the Center; and allow for easier transportation of materials. This system could easily be expanded as the need arises. The initial expense to implement such a computerized system is large. However, upkeep, upgrading, and expanding a system--once installed--does not require large outlays of money.

The curriculum needs in vocational and technical education can be determined by having instructors fill out questionnaries, at least annually, as to what should be useful to them in the future. The Center could tally these results and attempt to make these materials available. Such an assessment does require materials, service, and time...cost factors which are worth the monetary investment. Again, money should be available to conduct the assessment.

The effectiveness of the curriculum materials can easily be determined by setting up a system so the user of the materials can evaluate its effectiveness before returning the materials to the center for recirculation. Though an opportunity now exists for reaction to materials, a computerized system would be more efficient to obtain such data. This would also help the Center to identify resources of high quality, would be a means of being more selective of resources and lead to better utilization of storage space. The transportability of resources through a computerized system would strengthen the networking concept; therefore, reaching more people with services and materials.

Thank you for giving me, a student at Illinois State University, this opportunity to share my ideas with you.

Barbara Bush

Barbara Bush

October 26, 1983

Chairperson and Members of the Committee:

Thank you for allowing me to share my enthusiasm for the Sangamon Curriculum Center with you. My name is Eileen Falls and I am a senior at Illinois State University. Upon graduation in December, I will receive my Bachelor of Science degree in Home Economics Education.

This past spring I student taught at Delevan High School and experienced first hand the many benefits of the East Central Curriculum Center in Springfield. Prior to this teaching assignment, I had an opportunity to spend some time at the center. Through the information made available to me I was able to:

1. Use the most updated teaching aids and materials available.
2. Benefit from the experiences of those teachers who have assisted in making this material available.
3. And most important, the students were the recipients of not just one teaching concept, but were able to receive the benefit of a number of teaching ideas rolled into one through the use of the information made available to me through the Curriculum Center.

The resources the Center provided proved to be of very high quality, extremely helpful to me as a teacher, and I can assure you, both interesting and beneficial to the students as well.

Through my somewhat limited teaching experience, and my exposure to a number of long time teaching professionals, I have become very aware of:

1. The need for constant updated educational resources.
2. The increasing course loads and extra demands that limit the teacher's time for independent research.
3. The students' need to be kept abreast of the vast amount of information being made available, as well as the rapid technological changes taking place.

As you all know, the primary concern of a teacher is the student. I sincerely feel that the Curriculum Center, and its concepts will continue to be an ever increasing factor in meeting both the students' and teachers' needs. However, knowledge and money seem to go hand in hand, and financial assistance is needed to establish and maintain a system for determining curriculum needs in vocational and technical education, to coordinate activities in the curriculum development, dissemination and utilization, enhancing quality effort and the transportability of curriculum materials.

By developing a complete computerized library system, it will coordinate activities in curriculum development, dissemination and utilization. Through such a system, materials will be kept up-to-date. It will also allow for easier accessability and transportation of the materials. Computerized systems are easy to up-date and to enlarge when and if needed. The initial cost of such a system is large, but once it is installed it does not require a lot of money.

The curriculum needs in vocational and technical education as well as the curriculum effectiveness can be determined in one step. By creating a complete computerized library system, such a system could ask, upon return of materials, to evaluate what they used and to state what more could be done to meet the future needs of the teacher. Applying this information into a computer will create a more efficient system in helping to obtain particular data. Using the computer system to transport resources will only enhance and strengthen the Curriculum Center's concept while reaching more teachers.

Once again, thank you for listening to my ideas.

Eileen Falls

Eileen Falls

Testimony
Presented By

Richard W. Glogovsky
Assistant Director
Lake County Area Vocational Center
19525 West Washington Street
Grayslake, IL 60030

Presented to

Region V Education Director: Bob Hewlett
East Central Curriculum Network

on

October 26, 1983

USDE Region V Conference Room
12th Floor, Student Financial Assistance
300 South Wacker Drive
Chicago, IL

I'm Dick Glogovsky, the Assistant Director in charge of curriculum development at the Lake County Area Vocational Center, located in Grayslake, Illinois. The Center presently offers 20 vocational programs to more than 1300 junior and senior high school students bussed in from 19 feeder districts throughout the county.

Our Center opened its doors to students in September 1977. At that time a great deal of curriculum development needed to be accomplished, and very little was available from other schools. During that time we were introduced to Rebecca Douglass, Director of the East Central Curriculum Network. We were able to obtain a variety of curriculum materials for use at our Center. Since that meeting, our staff and I have been utilizing the Curriculum Center in many ways. Some of these include:

Acquiring materials used in

a. Teaching and serving Special Needs students.
b. Developing program task lists, objectives and course outlines for new and existing courses.
c. Identifying methods and materials helpful to beginning teachers.

The presentations given by the Network staff at our Center were especially helpful in having our instructors understand the services available.

During the last five years, our Vocational Center has been actively involved in utilizing the competency-based individualized learning delivery system. This competency-based system of learning has recently been made a part of the new federal bill dealing with Jobs Training Partnership Act. This delivery system requires instructors to examine existing traditional course content and develop a program task list and a great number of student learning guides required for utilization in a vocational program.

In reference to the move which is being made toward competency-based learning, I would suggest that the East Central Network continue their effort in making these materials available. I would support the continuation of the following ideas:

1. On a national basis, collect competency-based materials and make them available to institutions requesting the same.
2. Develop and maintain various bibliographies covering audio-visual aids relevant to occupational and technical education.
3. Continue to publicize Network services and materials available to staff and administrators.
4. Continue to tie into national computer networks for sharing and retrieval of information.
5. Search for curriculum for high tech and new and emerging occupations, and disseminate to state funded high tech project directors and to schools implementing the same.
6. Carry on a closer relationship with state funded grantees requiring curriculum materials and services from the Network.

With the continuing changes of technology occurring in this country, I believe it is important that the Network as well as educational institutions become involved in utilizing the microcomputer as an instructional tool. At the present time, our Center owns 25 microcomputers. The majority of them are used in our Data Processing and Secretarial Office Occupations programs. In this area, I believe the Network could be of assistance if some of the following efforts were continued and initiated:

1. Develop a bibliography identifying diskettes and user documentation manuals available for institutions searching for instructional materials available for use on a microcomputer.
2. Continue to promote the use of microcomputers in communicating bibliography lists, task lists, learning guides, etc. to various schools in the state.
3. Promote the development of a statewide model for a microcomputer-managed instructional system for competency-based instruction.

In conclusion, I would like to say that the East Central Network staff has been very helpful to our Center during the past seven years. We will continue to utilize their services in order to improve educational opportunities offered to our participating students in Lake County.

ChicagoStateUniversity

Department of Occupational Education
Ninety-Fifth Street at King Drive
Chicago, Illinois 60628

Telephone 312/995-3807

Ladies and Gentlemen:

My name is Dr. Norman G. Laws. I am a Professor of Education at Chicago State University, located at 95th and King Drive on the far South side of the city. I want to express my appreciation for this opportunity to visit with you about our relationships and experiences with the East Central Network for Curriculum Coordination. It has been a very positive relationship.

But before I continue, I want you to know that our 117 year old university has a long history in teacher education, first as a Normal school, a Teachers College and now a multi-purpose and multi-racial university. We offer both the bachelors and masters degree in our five colleges. My particular function is in the graduate program in the Department of Occupational Education within the College of Education. I am involved with advanced methods courses, curriculum development, and research courses.

At first the location of the location of ECN in Springfield seemed remote to us, especially with several fine libraries here in the city, including our own with ERIC , Computer Search etc. But more and more of our students reported to us their experiences with ECN. After the center was moved onto the Sangamon State University campus, I traveled to Springfield to inspect the collection. The Director, Rebecca Douglas and her fine staff took special effort to acquaint me with their activities and resources. And then Susie Shackleton came to our University campus and made a presentation to our graduate classes. These personal services as well as the descriptive literature has assisted us in understanding the resources available. Further the use of an 800 number and the return privileges through our own inter-library loan system makes this a very functional system. As I have become more efficient in telling students about the collection both graduate and post-graduate students increasingly are making use of the ECN. At the recent Illinois Vocational Association convention, and I presume at other conventions, representives of ECN have provided information and I am sure that this has increased the use of the collection.

I do have one concern. It appears that not all states are making copies of their materials available to the ECN. At least I know of certain studies in the field of Occupational Education (sometimes called vocational or industrial education) not now in the collection from such states as Minnesota and Wisconsin. Perhaps this is a cost factor to the supplying agencies. But whatever the reason, this is a factor that needs attention.

I do not know what the policy is in terms of historical materials. While it is fine to have a larger and larger collection, I feel that the usefulness of this type of collection is its relevance to current needs. Therefore, I suggest that a policy be developed that will keep the collection timely.

I want to thank Ruth Patton for telling me about this hearing and Rebecca Douglass and her staff for working so cooperatively with our university. And finally, I want to thank the U.S. Department of Education for authorizing this activity and sincerely hope that you will see fit to continue its operation.

TESTIMONY PRESENTED TO:

East Central Network for Curriculum Coordination Center

and

U.S. Department of Education Region V

Submitted by:

Jeanne Lopez-Valadez
Hispanics in Vocational Education

Introduction

My name is Jeanne Lopez-Valadez. I am currently directing the Bilingual Vocational Education Project, a statewide resource center serving voctional programs with limited English proficient students. I am here today representing Illinois Hispanics in Vocational Education, a coalition of individuals, community-based organizations and business persons concerned with improving vocational training and employment opportunities for Hispanics. Appendix A describes the organization's purposes and its Board of Directors.

Findings

Hispanics are a significant and growing segment of the population.

- The 1980 Census reported that Hispanics comprise 6.5% of the population. Estimates by the Population Reference Bureau project that by the year 2080, Hispanics will be the largest ethnic minority comprising between 24-34% of the population depending on immigration levels.

The Hispanic population has historically had a higher unemployment rate, a disproportionate percent of unskilled, low-level jobs, and lower family income levels than the general population, as substantiated by the following data:

- National unemployment rates for January 1980 show 6.2% unemployment for the general population while Mexican-Americans had 9.1% and Puerto Rican's a rate of 10.5%. A midwest example is Illinois which in 1978 had a general unemployment rate of 5.4% but 8.9% for Hispanics. Unemployment is most severe among Hispanic youth ages 16-24. They represented nearly 45% of all unemployed Hispanics although they comprise only 26% of the total Hispanic labor force.
- Workers of Spanish origin are much less likely than the total working population to be employed in the professional and technical, and managerial and administrative occupation groups. Only 13.0% of Spanish origin male workers hold jobs in these occupational groups compared to 28.8% of white male workers. This disparity is also true for women. Women employed at these levels are 9.7% of Spanish origin female workers vs. 20.9% of white female workers. At the other end, 33.8% of Spanish origin male workers are employed as farm workers, laborers or service workers, while only 21.4% of white male workers hold these types of jobs. (Source: Workers of Spanish Origin: A Chartbook, 1978)

- Spanish origin men with income had lower median incomes in 1977 than men who were not of Spanish origin ($7,797 and $10,261, respectively). The median income of Spanish origin women with income in 1977 ($3,669) was substantially lower than that for Spanish origin men ($7,797), and somewhat lower than the median income of women not of Spanish origin ($3,956). (Source: Sourcebook of Equal Educational Opportunity, 1979)
- About 21 percent of Spanish origin families had incomes below the poverty level in 1977, as compared with about 9 percent of families not of Spanish origin. A smaller proportion of Spanish origin families had high incomes in 1977 than families not of Spanish origin. Only 9.7% of Spanish origin families had incomes of $25,000 or more compared with 23% of families not of Spanish origin. (Source: Sourcebook of Equal Educational Opportunity, 1979)

Despite the fact that traditionally Hispanics have been tracked into vocational and non-college bound programs, there is a surprising underrepresentation of Hispanics in vocational education programs, in particular at the post-secondary level. Another disparity can be found in the distribution of Hispanic participation in vocational education which reflects an under-representation in the Health and Technical areas. (See Appendices B and C for Hispanic VEDS data from Illinois).

The low level of participation by Hispanics can be attributed to the lack of three major elements: awareness of services and career options, access to training programs, and appropriate programs and support services. These problems are closely related to the lack of available resources - funding, personnel, materials.

Linguistically and culturally appropriate Curriculum resources are especially crucial to serving the Hispanic population, as data shows that only 58 full time vocational educators are Hispanics. Unfortunately, commercial publishers have been slow in responding to this demand. As a result local programs are compelled to develop their own products. Without key information regarding existing resources, many are duplicating the efforts of others.

The East Central Network for Curriculum Coordination Center can fill the much needed role of disseminator. However, few programs working at the community level or with special populations like limited English speaking students are aware of the center. Moreover, the center's current collection is sorely outdated and unrepresentative in terms of resources in the fields of career education and vocational training of Hispanics. The collection contains only 110 or so items under the heading "Bilingual Materials" and many of these were donated by the Bilingual Vocational Education Project rather than purchased by the Center.

The ECCMC has much to offer in terms of materials and expertise. To meet its full potential more must be done to enhance the collection, to outreach to those serving Hispanics, and to fiscally support services to this population. Following are a series of specific suggestions.

RECOMMENDATIONS

A. Improve search capabilities and quality of resource collection by:

1. Identifying key persons and agencies serving Hispanics in the areas of career education and counseling, vocational training, adult education, ESL and employment;

2. Conducting an annual search of federal, state, local and commercially developed resources appropriate to Hispanics;

3. Establishing and maintaining communication with other curriculum resource centers such as the National Clearinghouse for Bilingual Education, the (Bilingual) Evaluation, Dissemination and Assessment Centers, and the Bilingual Education Multi Purpose Service Centers;

4. Formalizing a process whereby relevant federally produced resources (i.e., bilingual vocational products from national programs) are automatically placed in regional curriculum centers;

5. Seeking recommendations and evaluations for the purchase of materials/ products for the collection.

B. Improve dissemination activities to reduce duplication of effort by:

1. Increasing mailing lists for newsletters and announcements to include: 1) special funded programs for Hispanics, refugees, migrants, limited English proficiency persons; 2) bilingual and bilingual vocational teacher training programs; 3) relevant resource centers; and 4) Hispanic community based organizations;

2. Identifying and sending representation to Hispanic, migrant, bilingual, and ESL state, regional and national conferences;

3. Disseminating information regarding ECCMC's services and resources through Hispanic, bilingual, ESL and migrant newsletters and journals;

4. Compiling and disseminating a bibliography of resources relevant to cultural and language minorities reflecting the various collections of the six regional curriculum centers.

C. Assist local programs in the development of quality resources by:

   1. Funding/conducting a regional curriculum needs assessment to determine priorities for materials development. Current data indicates a need for bilingual/bicultural career resources, bilingual vocational instructional support materials, vocational English as a second language curricula, and bilingual vocational assessment instruments. A federal study conducted in 1978 by Development Associates identified potential occupational areas for curriculum development and provided a model for determining priorities; (See Appendix D)

   2. Conducting local and statewide inservices on the development and adaptation of linguistically and culturally appropriate materials for Hispanics, particularly for limited English proficient and/or special needs youth;

   3. Funding or promoting the inter-state and inter-agency funding of curriculum development projects;

   4. Purchasing and facilitating the use of computer programs which help identify vocational related language for English as a second language curricula.

D. Improve commitments to under-served populations through:

   1. Representation of Hispanics on the staff of the ECCMC, its projects and advisory committees;

   2. Allocation of a set percent of its budget (reflecting regional Hispanic population) for activities and services for Hispanics, particularly those that are limited English speaking and with special needs.

ppendix A

HISPANICS IN VOCATIONAL EDUCATION

Purpose

HISPANICS IN VOCATIONAL EDUCATION is a not-for-profit organization dedicated to quality vocational education, especially for Hispanics.

HISPANICS IN VOCATIONAL EDUCATION sets forth as its major objectives the following:

1) To establish and maintain a network for information:
   a) share resources,
   b) foster communication among Hispanics and other providers of vocational education,
   c) serve as an advocate.

2) To provide a forum for the presentation and open discussion of issues related to the delivery of training programs for Hispanics.

3) To serve as a resouce in the delivery of training programs for Hispanics.

4) To work with and/or serve as advisors to state, local, national, and private agencies dealing with vocational education.

5) To promote better understanding in and about the Hispanic community.

Membership

Membership is open to any person or group who is interested in working to improve the quality and quantity of training programs for Hispanics.

There shall be three (3) types of membership. They are as follows:

a) Active Member: one who participate in, and attends the meetings and activities of the organization regularly.

b) Associate Member: one who endorses the goals and activities of the organization.

c) Corporate Member: a business organization which supports the goals and activities of Hispanics in Vocational Education.

Dues

The annual membership fee is due by the first general meeting of the organization in October.

Membership dues are as follows:

Active Member:	$ 12.00 per year
Associate Member:	12.00 per year
Corporate Member:	100.00 per year

Board of Directors

President: Jeanne Lopez-Valadez
Bilingual Vocational Education Project

Vice President: Carmen Quiles
Federal Aviation Administration

Advocacy Committee: Miriam Lugo Gonzalez
Chicago Urban Skills Institute

Funding Committee: Jessie Lopez
Illinois Migrant Council

Networking Committee: Guadalupe McDougald
Truman College

Correspondence Secretary: Angel Figueroa
SAFER Foundation

Treasurer: Richard Valencia
Truman College

Recording Secretary: Joanna Escobar
College of DuPage

For more information contact: Jeanne Lopez-Valadez
Bilingual Vocational Education Project
500 S. Dwyer Avenue
Arlington Hts., Illinois 60005
(312) 870-4150

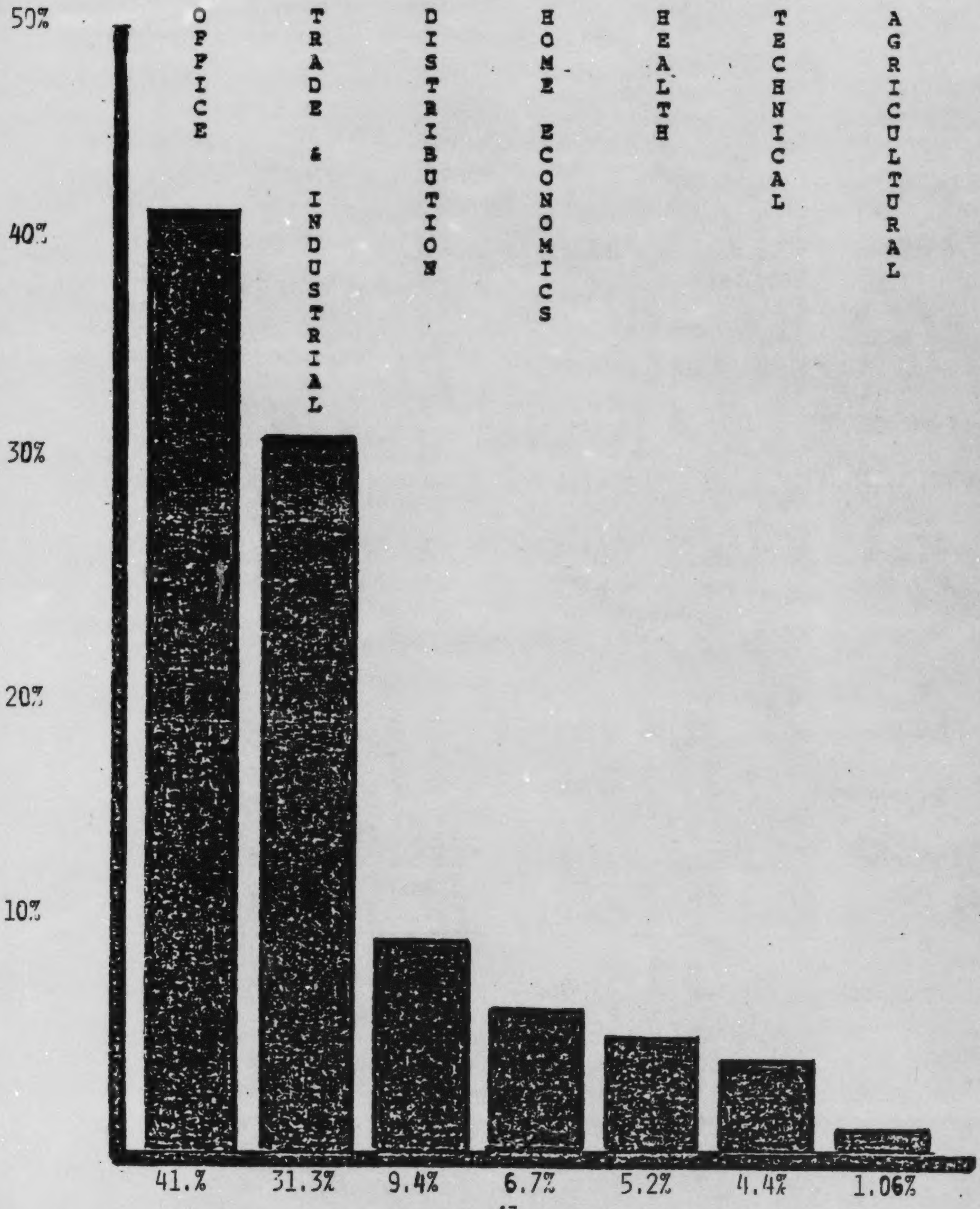
Appendix B

	Hispanic Male	Hispanic Female	Hispanic Total	General Population Total	% of Hispanic Participation
Secondary					
Exploration	6,889	7,904	14,793	328,782	
Training	3,403	3,754	7,157	189,796	= 3.77%
	10,292	11,661	21,950	518,578	
Post-Secondary					
Exploration*	2,433	2,863	5,296	79,025	
Training	2,533	2,800	5,333	212,425	= 2.51%
	4,966	5,663	10,629	291,450	
Adult					
Exploration*	513	252	765	15,837	
Training	373	102	475	15,918	= 2.98%
	886	254	1,240	31,755	
GRAND TOTAL	16,144	17,675	33,819	841,783	= 4.02%

* Undeclared major, training not involving VEDS follow-up activities.

Hispanic Participation by Training Area

Appendix C



CHAPTER IV

SUMMARY OF RECOMMENDATIONS AND OTHER CONCLUSIONS

This chapter summarizes recommendations which are discussed throughout the Guide. These are, of course, directed to decision-makers at the federal level since they are derived from an analysis of national data. State and local decision-makers may, obviously, arrive at different conclusions about priorities which will be predicated upon local data. Some additional conclusions relevant to the development and dissemination of bilingual vocational materials are also included. These conclusions and recommendations are not intended to be definitive. Perhaps they will stimulate ideas which will lead to enhancement of efforts to meet the vocational needs of limited English speakers.

SUMMARY OF RECOMMENDATIONS

- The following languages and occupations are recommended as national priorities for the development of bilingual vocational materials:

LANGUAGES

Chinese
Filipino
Korean
Navajo
Spanish
Vietnamese

OCCUPATIONS

Industrial Production
  Machinist
  *Assemblers
  *Inspectors
  Power Truck Operators
  Wastewater Treatment Plant Operators
  *Welders

Construction Occupations
  Electricians
  *Carpenters
  *Construction Machinery Operators
  *Plumbers and Pipefitters
  Painters and Paperhangers

Office Occupations
- *Bookkeeping Workers
- *Cashiers
- *File Clerks
- Receptionists
- Secretaries & Stenographers
- *Stock Clerks & Statistical Clerks
- Typists
- *Computer Operators
- Bank Clerk and Bank Tellers

Service Occupations
- *Building Custodians
- *Cooks and Chefs
- *Food Counter Workers
- *Cosmetologists
- Bartenders

Mechanics and Repairers
- *Air-conditioning, Refrigeration, & Heating Mechanics
- *Automobile, Truck and Bus Mechanics
- *Industrial Machinery Repairers
- *Maintenance Electricians
- Television and Radio Service Technicians
- Appliance Repairers

Health Occupations
- Dental Laboratory Technicians, Hygienists
- *Medical Laboratory Workers
- *Medical Record Technicians and Clerks
- Respiratory Therapy Workers
- *Licensed Practical Nurses
- *Nursing Aides, Orderlies, and Attendants

*Social Service Occupations
- Social Service Workers, Home-making, Consumer Education, etc.

RECOMMENDED OCCUPATIONS REQUIRING JUNIOR COLLEGE, TECHNICAL INSTITUTE OR OTHER SPECIALIZED TRAINING

- *Computer Programmers
- *Accountants
- Buyers & Credit Mgrs.
- *Health & Regulatory Inspectors
- *Library Technicians & Assistants
- *Engineering & Science Technicians
- Surveyors
- Computer Service Technicians
- *Dental Assistants
- *Radiologic Technologists
- *Registered Nurses
- Commercial Artists

- The following bilingual vocational materials should be developed for these languages and occupations:

  - Diagnostic and Assessment Instruments

  - Trainee Materials in a Variety of Media (e.g., audio, motion visuals, still visuals, print) including criterion-referenced pre- and post-tests.

  - Instructor Materials (e.g., guides, training packages)

  - Program Management Materials (systems for installing, implementing, and evaluating curricula)

  - Employer Materials (pamphlets, booklets, etc., to reduce cultural misunderstandings)

- Training methodologies should be consistent with the concepts of competency-based education and adult learning.

- A variety of methodologies and techniques should be available so that instructors can choose those which are most congruent with the trainees' culture, skills, and learning style. Examples of some which are thought to be effective are: hands on, demonstration, and other experiential techniques like games, role playing, simulations as

Jim Naylor
Vocational Director
Lockport, Illinois, Township High School

I am making these comments in lieu of appearing at the hearing being held for consideration of ECN.

A would like to address several topics. First, I have some concerns about how curriculum materials are disseminated especially in the state of Illinois. All too often it seems that those who develop materials and are then charged with dissemination have not considered some of the problems faced by local school administrators.

It is increasingly difficult for local school officials to allow classroom teachers to be absent from their classes for an extended number of days. Most administrators feel strongly that when the regular classroom teacher is not there that often all that is accomplished is babysitting. And qualified substitutes in the vocational area are nearly impossible to secure.

This problem goes beyond economic considerations. Even though the cost of substitute teachers is high, the quality of education is still more important than the economic consideration. Therefore, it would seem that for dissemination of good quality curriculum materials to instructional staff, we should be considering some alternative means such as providing workshops for teachers after school, on weekends and so forth. If that isn't possible, shorter meetings, localized, so that teachers would only have to be out of their classrooms for perhaps half a day as opposed to an entire day or several days would be preferable.

Another issue concerning curriculum in the state of Illinois is that of quality. Over the past several years a great deal of curriculum material has been developed under special contract for use in Illinois schools. Some of that material is very excellent and should enjoy wide dissemination. Some of the material is of less quality and some of it is probably of very little value to instructional staff.

It would seem that a process should be developed to insure that curriculum materials that are disseminated to local schools be of the very highest quality. Then they would warrant the time and cost expended to disseminate them and warrant the time expended by the local district to send staff members to learn how to use these materials.

Another area that is of concern to me as a vocational educator is how do we get those very good quality materials into the hands of instructional staff who ultimately will be the ones who will use or not use them. All too often it seems that workshops, because of when they are scheduled and where they are scheduled, attract administrators. The administrators attend the workshops, carry the materials back and attempt to put them into the hands of instructional staff. Yet they are not successful, in many cases, in getting the instructional staff to use those materials.

It would seem that, again, a system needs to be developed that will insure that good quality materials are put into the hands of instructional staff who need to use them. Perhaps a way of insuring that would be to provide incentives for districts to send instructional staff members to local workshops or dissemination activities. Those incentives could be provided and may take the form of additional reimbursement to the school district -- if indeed, their staff member(s) attends a workshop, accept good quality curriculum materials, and learn how to use them.

An example might be that if an excellent curriculum in the area of auto mechanics is developed, that some incentive should be provided for local school districts to send the auto mechanics teacher to a nearby workshop to learn how to use that instructional material. Just notifying the school district that the workshop is available probably is not getting the materials into the hands of the people who will need to use it. So some type of incentive system needs to be developed to insure that that will take place.

Another area that the ECN/IVCC may want to look at is the whole area of communications with local school districts. A great deal has been done recently to improve communications with local school districts. I note, for instance, that there is now an 800 number to call for assistance. Staff has been increased and publications seem to be more frequent and of better quality.

On the other hand, as a busy school administrator, I tend not to pay a great deal of attention to catalogs and newsletters that I have to sort through to find pertinent information. While those are all valuable methods of communicating really important items, new curriculum materials probably need to be sent out individually, in a simple and attractive fashion, so that it will catch my eye and that I will pass that along to the appropriate instructional staff in my district. So in summary, communication that goes to local administrators needs to be attractive and eye-catching. Some incentive system needs to be used to be sure that the materials get into the right hands, not buried in a newsletter some place.

I certainly appreciate the opportunity to share these thoughts on curriculum and curriculum dissemination. Thank you very much for your consideration.

Testimony Presented By:

Urban T. Oen, Ph.D.

Project Director

Illinois Competency Based Vocational Education Project

Lake County Area Vocational Center

19525 W. Washington Street

Grayslake, Illinois 60030-1194

Submitted To:

East Central Network for Curriculum Coordination

Public Hearing

USDE Region V Conference Room

12th Floor, Student Financial Assistance

300 South Wacker Dr.

Chicago, IL

October 26, 1983

Introduction

First of all, I would like to state that I direct an Illinois State Board of Education, Department of Adult, Vocational, and Technical Education funded project entitled the "Illinois Competency-Based Vocational Education Project." The purpose of this project is to assist vocational-technical educators of comprehensive high schools, area vocational centers, community colleges, and teacher education institutions in the development and implementation of competency-based vocational educational programs. During the first five years of the project, CBVE curriculum materials for 44 different programs were developed. Copies of these were deposited with the ECNCC. At the present time, we refer educators to the ECNCC for loan sets of our materials which they can copy for their use. We also refer educators to the ECNCC for copies of V-TECS, competency studies from other states, and for curriculum materials.

Future Curriculum Needs

In the future, we would like to see the ECNCC do the following:

1. Keep us informed and updated of any new CBVE materials which are developed by other states.
2. Obtain CBVE curriculum materials from other states which may be of use to Illinois vocational educators. My staff and I are willing to review materials for purchase and inclusion into the network. Only quality materials should be included.
3. Inform primary groups of vocational educators of all new CBVE materials which are obtained for loan. This can be done by informing newsletter editors of the different vocational groups, by targeting newsletters to these different groups, and by using a computer network throughout the state.
4. Cooperate with the ICBVE project to develop state "model" task lists to facilitate the movement to CBVE.

5. Develop a faster and more efficient information retrieval system so teachers can access state of the art curriculum materials on a daily basis via a computer hook-up.
6. The center should computerize the following data banks for the different occupational clusters:
   - A. Task lists
   - B. Performance objectives
   - C. Written exams
   - D. Product/performance checklists
7. Promote the development and loan of more audiovisual materials especially for teacher education and for the specific occupational and technical areas.
8. Additional sets of the bulky CBVE student learning guides should be added to the system so the waiting period can be reduced for those who request loan sets of the materials.
9. Identify and maintain an updated list of model CBVE schools in other states. This would facilitate the movement in Illinois.
10. Assist the ICBVE project to set up and develop a statewide model computer management information system. This system is necessary to facilitate the implementation of CBVE in Illinois. Perhaps this system could be made available to schools on diskettes and user documentation manuals.

Prepared for:
The East Central Network
for Curriculum Coordination
Center
By: Jack Pfeiffer

YOUR THRUST:

I. Identify the components of the Vocational Curriculum in terms of "Needs of the Future".

MY PREMISE:

II. Can't improve vocational education without knowledge of the realities of where education is today in a total concept of needs. Nor can you bring about improvement if you only look at changes in "Vocational Education" as it traditionally relates to the "schooling for kids".

III. A. VOCATIONAL PROBLEMS:

1. Training for future jobs
    a. Identify these jobs/timing
2. Problem of technology
    a. Equipment/staff retraining
3. Other people are in vocational training
    Business - not just education
    a. J.T.P.A./Private business
    b. Retraining displaced homemaker/worker
    c. Adult education centers
    d. Private enterprises
4. Funding
    a. Block grants
5. Declining population of traditional student
    a. Decline in birth rate/drop-out rate

IV. NATIONAL STATUS: A Public Form in Illiteracy--Rep. Helen Satterthwaite

1. According to a nationwide study conducted in 1979, 23 million Americans are illiterate and another 23 million are considered functionally illiterate (cannot read above a 5th grade level).
2. The United States ranks 49th among the 158 United Nations members in terms of percentage of citizens who are literate;
MAIN POINT - that represents a drop of 18 places since the 1950's.
3. 75% of the unemployed have inadequate reading and writing skills; so do 85% of the juveniles brought before the courts, 90% of mothers on welfare and half or more of all prison inmates.
4. 44% of black teenagers are considered functionally illiterate, while 56% of Hispanic teenagers are functionally illiterate in English.
5. 62% of American families are single parents, or both parents work.

V. NATIONAL CENTER FOR EDUCATIONAL STATISTICS:

1981-3.8 million entered high school, 1 million did not finish (72.1%-finished)

1. Illinois class of 1981 - 73.2% (+75.1)
   a. 40,000 a year - 16-18
   b. 1 out of 4 don't finish
   c. now over 18-3 million + not completed? Compared to 2 million + trying to complete
   d. 15% illiteracy rate

VI. DIGEST OF EDUCATIONAL STATISTICS-1982:

1. Of 100 high school starts, 74% completed. Of 74%, only 46% attended college--23% to completion.

POINT: More people drop out of high school than complete college.

VII. NATIONAL COMMISSION OF EXCELLENCE:

1. Also identifies 23 million functional illiterates. One out of 5 over the age of 18 cannot read beyond the 5th grade level.
2. In addition, speculation on the number of graduates with deficiencies.. causes higher education to offer remedial classes in reading and math.
3. Curriculum changes: more academic classes.
   a. Vocational education may be an elective.

VIII. ISBE STUDY:

1. Longer day, higher requirements and State of Illinois raising age to 18 - and "or enroll with parents' approval in an alternative education program accepted by the school district."
   a. Longer day = 1/7 more money - non-realistic.
   b. Higher requirements - Now law in Illinois
      1. Coop program problem.
      2. Area Vocational Center.
      3. Specific job skill training.
      4. Vocational classes redesigned to meet new requirements (math).
2. Study showed--80% drop-outs later wished they had not.
3. Problem: Return to what?
   To gain what? (size of population)
   a. Funding consideration.
   b. Program delivery.
   c. Different definition--completion of secondary.
   d. Time frame of attendance.
   e. New credentialing--need for statewide acceptance.
   f. Competency/proficiency based curriculum.
   g. Statewide acceptance of basic occupational skill level of completion.
   h. Curriculum changes to fit the new population of needs.

IX. POSSIBLE SOLUTION:

1. Assist in formulating new priorities on funding--not same old ones.
2. Assist in development of curriculum based upon "outcome goals".
3. Assist in developing a statewide credentialing system with new definitions.
4. Creation of a realistic program to assist all those now caught in the middle of the traditional elementary and secondary system and the higher education system.
5. Continuation of the efforts of IVCC/teacher training by workshop.
6. New lines of communication/business-industry/new vocational training agencies.

Remarks to

U. S. DEPARTMENT OF EDUCATION, REGION V

hearing on the

EAST CENTRAL NETWORK FOR CURRICULUM COORDINATION

Chicago, Illinois

26 October 83

Merrill Redemer
Associate Professor of Administration
Sangamon State University
Springfield, Illinois

REMARKS TO THE COMMITTEE

Good Afternoon. I appreciate the opportunity to appear before you and provide some observations on the East Central Network Curriculum Coordination Center. My name is Merrill Redemer. I am an Associate Professor of Educational Administration and affiliated with the Center for Policy Studies and Program Evaluation at Sangamon State University in Springfield.

Although I am on the Advisory Committee for the Curriculum Center, I cannot honestly say that my background in vocational and technical education is strong enough to give piercing insight into the specific roles and responsibilities needed for the Curriculum Center to make its greatest contribution.

I do feel comfortable, however, in reflecting on those needs from a more general educational perspective and to explain some observations that I have taken since deciding to come before you during this hearing process.

Let me first explain the rationale, procedures, and results of those observations that I took in the process of preparing for this testimony. There is a basic - and I submit - valid assumption that those who use services as clients are in the best position to reflect on the perceived value of those services. An extension of this logic holds that those same clients are able to suggest areas and procedures for expanding those services to make them more valuable.

The limitation of this assumption is that it must be expected to be present oriented and preoccupied with addressing those most pressing problems. As we know, we cannot expect to find good planning or even a strong concern for the future when present-day issues are critical. This is best captured in the trite but true statement: "It's hard to remember we came to survey the swamp when we're up to our neck in alligators." Therefore, I would not expect a survey of those who are practicing vocational-technical educators or any other educational practitioners to reflect widely on future needs. The results were as expected.

Based on the assumption of knowledgeable clients and in large part because of my previously admitted inability to speak authoritatively on vocational-technical matters, it seems appropriate to elicit the perceptions of clients and to report those perceptions to you.

Toward that end and in view of the time constraints, I devised an abbreviated instrument that could be administered in a short telephone conversation. This, of course, followed a preliminary effort to assure that almost all the population of clients could be reached by telephone.

Let me hasten to assure you that the list of 25 possible respondents did not constitute a representative sample for (1) The University has my telephone wired so that I can't call out-of-state, thus excluding those clients beyond Illinois state borders, and (2) There was some selectivity based on my desire to assure regional representation as well as representation of regional centers, correctional institutions, personnel from programs dealing with mentally or emotionally handicapped as well as elementary and secondary schools. I even found one person who was doing university research listed as a client and couldn't overcome the curiosity to see what was being provided to such client. There were no community college personnel listed on my survey prospects. Further preventing this from being a scientifically determined representative sample is the way I went about it. I merely leafed through the card index of clients and picked out interesting ones reflecting the characteristics cited above. The size of the sample is also too small to comfortably make inferences to the total population. However, as you will recall from your first course in research methodology, aggregated observations with little variance does indeed permit inferences based on small sample size.

Instrumentation for this exercise was also very simple for there were few dimensions that I was trying to tap. Those dimensions were (1) Type of service most frequently used, (2) Estimated number of times the service was used for a referrent year, which I arbitrarily set as FY'83, (3) Overall satisfaction with the services provided by the Curriculum Center, (4) Areas of perceived greatest strength in the Center's operation, and (5) Areas of needed expansion and/or improvement.

By far the most commonly cited type of service utilized was that of material loans. This was followed by searches for relevant materials, referral services and inservice education. Obviously these categories of service are not totally discrete for searches quite frequently led to the acquisition and subsequent loan of those materials. By the same token, inservice education often happens so subtlety that the person who is picking up materials with the Center staff may not recognize that they are learning something about those materials in the process.

The number of times during FY '83 reported by the respondents ranged from one to 30 with an average of 12.5 times for that period. Although I did no further analysis via crosstabs, there did appear to be some relationship between proximity to the Center and frequency of use. As an aside, however, no one complained of being denied access because of distance - this in spite of respondents being as far away as the Quad Cities Area and Lake County.

Next I posed the question: "In terms of the overall services provided you, would you say that you were highly satisfied, somewhat satisfied, somewhat dissatisfied or strongly dissatisfied with the services provided?" Without hesitation all but two stated "Highly satisfied." One of those expressed "Somewhat satisfied" and the other divided the response between "Somewhat satisfied" and "Somewhat dissatisfied." This last respondent, whom we must recognize as being the least positive, ironically enough was the respondent who cited the greatest number of times in using the resources.

We must not begin speculating about this relationship, for we all know the hazards of such conclusions.

Respondents had few problems answering what area of the Center's operation was most effective. Areas most commonly cited were (1) Convenience in getting materials returned via library system, (2) Speed of getting material, (3) Comprehensiveness of material selection, (4) Extremely helpful staff, (5) Recent nature of material, (6) Quality of material, and (7) The savings to the local school districts. There is no ranking of those areas cited.

Areas for proposed expansion and/or improvement were not as numerous. They include (1) More information about services provided, (2) More up-to-date material, (3) Reviews and evaluation of software, (4) More filmstrips needed, (5) More on career guidance, (6) Learning packets for specific job tasks, and (7) A separate "800" number so that the University's "800" number doesn't prove to be a bottleneck.

In summary let us say that those clients of the Center are very happy with the services currently provided and that there are few proposed new ventures and few problems cited by those respondents. Let me caution again, however, about being too general in making inferences.

If we can believe, however, that those observations reflect a high degree of satisfaction - and I firmly do believe that - let's look at the implications for program direction and expansion. Being somewhat conservative in the way I view the world of educational developments, I would suggest that the most responsible thing or avenue the Center should pursue in its plans for future endeavor is to emphasize its strengths, build upon that solid base of client support and expand cautiously into new ventures. If bold new program activities are undertaken without definite assurance of adequate resources, an erosion of current program quality will occur.

What are these areas of possible and desirable expansion? Once again let me speak from the perspective of general education and reflect on a bit of history, since you, Rebecca, were still in high school during these developments. During the early sixties educational evaluation was in a rather amorphous state. Conceptual designs were not being developed beyond Tyler's work of long before. Techniques and strategies were not being developed with any degree of progress that one would expect. The actual practice of evaluation was generally not done in any formal or routine manner and this activity if done at all was of very low priority. Then came the Vocational Education Act of 1963 which did a lot of exemplary things that were subsequently reflected in other education bills passed by Congress. One of those features was money that was targeted for research and evaluation with required evaluations. Those funds which were specified for evaluation focused enough time, attention and resources on evaluation theory and practice to really get things hopping. This resulted in excellent conceptual designs, and evaluation became more of a common practice than a dirty word. The result was that vocational-technical education was far ahead of general education in those developments. Other areas of education subsequently followed that leadership. Let me tie that story in with some current developments in our schools.

As we look around we see people scurrying about trying to do their best to get computers into the classrooms and offices of the schools. There are some aspects to these efforts that are more in disarray than the evaluation efforts cited before; perhaps because of this flurry of activity there are even greater chances of goofing up the works so to speak. We see that there are great needs in software evaluation and development, great needs in hardware selection and employment, further needs in organizing for this new partner and a large gap in understanding the potential of computer assisted instruction and computer managed instruction.

What I am suggesting is that these are areas of common need, since most schools now have microcomputers. I would welcome the sight of you taking a leadership role as you have done with evaluation, research, diffusion, regional cooperatives and instructional design. Sound educational uses of microcomputers in the vocational-technical programs will "spill over" to other areas of the curriculum of our schools. The State Education Agency in Minnesota has an excellent model that I know you are familiar with.

In short, I would say that the Curriculum Center is headed in the right direction. Stay with that direction and thrust and continue to build a satisfied clientele. You are doing some things now in CAI - and that's excellent - continue those efforts and if other resources become available that is the area which has perhaps the greatest curricular need.

Thank you.

ECN Testimony

by

Charles Schickner, Illinois

A committee of the East Central Network (ECN) consisting of Ed Brown - Indiana, Ed Cory - Michigan and Charles Schickner has been involved for over a year in the consideration and development of a minimum curriculum format for vocational education. This curriculum format has been presented to the memberstates of the ECN and a draft copy exists with several minor modifications to reflect individual differences between the ECN states.

In the development of the curriculum format, it became obvious to this member of the committee that there are several improvements still needed to make it a success within the ECN. These improvements include the following:

1) The development of a reference to assist curriculum developers in the use of the ECN curriculum format.
2) The implementation of inservice activities to facilitate the adoption of the format.
3) The acquisition and dissemination of information about proposed curriculum products which will use the format.

The inclusion of these recommendations into the scope of work for the ECN will, in the estimation of this SLR, facilitate the implementation of the curriculum formats. And, the end result of this effort should improve the sharing and use of curriculum materials within the ECN region.

Testimony for 10-26-83
By Michelle M. Sibigtroth

As Director of the Region 2 Career Guidance Center, I would like to illustrate specific examples of how our Center has utilized the East Central Curriculum Center.

ECC staff members have made presentations, upon request of the Career Guidance Centers, to workshop participants of the Traveling Career Show, which was held in Rockford, Aurora, Sterling, and Moline. Two software evaluation sessions were provided by the Microcomputer Assistance Project staff for the Illinois Women Administrators Conference in Rockford. Also upon recommendation of the Region 2 Career Guidance Center, the faculty members in each department at the Rockford Area Vocational Center received technical assistance from the ECC staff for improvement and development of curriculum.

Personally I have made career guidance presentations where I incorporated the explanation of East Central Curriculum Center services and then disseminated their materials to participants. The groups involved in these presentations were: a Northern Illinois University vocational special education graduate class, the Jefferson High School faculty, the Washington Adult Education Center faculty, and the McHenry County Curriculum Council. I also helped coordinate a session at the Northern Area Adult Education Regional Conference where again, the ECC services were explained and their materials were disseminated.

East Central Curriculum Center brochures, bibliographies, newsletters, request forms, etc., have been disseminated by the Region 2 Career Guidance Center at approximately 20 workshops, meetings, and teacher institutes. Articles in the Career Guidance Center newsletters have advertised the services of the ECC and also highlighted specific items available such as audio visual materials, updated bibliographies, and curriculum manuals.

One can see by my specific examples that the services of the ECC have reached thousands of educators, counselors, and administrators--personnel working with kindergarten through adult populations and including personnel from special needs to the gifted and talented. The responses to the availability of materials, information, and technical assistance at no cost has resulted in extensive utilization of the East Central Curriculum Center.

I have requested numerous bibliographies, along with specific materials, from ECC to use in developing my own presentations and in coordinating in-service training sessions and workshops. For example, three of the Northern Career Guidance Centers recently sponsored three workshops titled, "Career Pathways to Success for the Gifted/Talented". Since there is not yet a great deal of career guidance material developed for the gifted, it would have taken me many hours to search for pertinent books and manuals. With an ECC bibliography, I was able to quickly locate the material I needed, and it was then available at the gifted workshops for participants to review.

For those people who visit the Career Guidance Center for individual technical assistance, ECC information and materials are an integral part of the assistance I provide to them.

I have also called the ECC staff numerous times for advice, search assistance, curriculum and microcomputer information. They make sure that the responses to my requests are thorough and they also conduct themselves in a professional manner--whether the contact be on the telephone, written correspondence, or a presentation. When I request materials they arrive promptly to my office. Two weeks ago, a presenter that I had scheduled for a conference, cancelled three days before the designated date. Because of the dedicated staff at the ECC, the Director of the Microcomputer Assistance Project drove from Springfield to Rockford to replace the cancelled presenter's sessions. If the East Central Curriculum Center is not able to fill a request, their staff will make sure that another person or organization is contacted who can provide the requested services.

In conclusion:

With school districts and agency resources being depleted, a central clearinghouse such as the ECC provides the answers to these dilemas. Why should schools and agencies duplicate efforts, when one central organization can work as a coordinating vehicle for the entire state. It can research, compile, develop, and evaluate materials, techniques, programs and resources. The results from these processes can then be disseminated. The East Central Curriculum Center is an efficient, cost effective organization for the state of Illinois.

ECNCC Testimony Chicago October 26, 1983

I am Ronald W. Stadt, Professor of Vocational Education Studies at Sourthern Illinois University, Carbondale. I represent a department of approximately 50 professors and instructors. We conduct professional development programs at all levels. In several respects we are the largest department of our kind.

I am responsible for one of our programs which evidences this point. In addition to several hundred undergraduates at Carbondale, we have more than 900 majors at sixteen military bases in ten states. These people are preparing for instruction and related roles in the military, public post-secondary institutions, and business and industry.

This means that we teach a great many curriculum and methods courses. In our course materials, we feature the NNCCVTE, the ECNCC and the IVCC. Of course, we explain the curriculum development roles of teachers and text publishers and other consortia with which the Network cooperates. But, we stress advantages of borrowing materials from network holdings. No other resource is as powerful as the many thousands of items in the Network.

The Network has very real advantages/fine features. (1) Not the least of these is minimum expense. Even in better economic times educators need a ready source of free and inexpensive materials. Many teachers in my acquaintance have been elated to learn that they may borrow materials, copy them at will, and only be responsible for the expense of returning them. Measured in terms of cost per student who has improved learning experiences, network costs are a bargain to the taxpayer.

(2) The effectiveness of ECNCC and IVCC employees is attested to in reports of formal evaluations and people like myself and my students who have availed themselves of various services. To the accolades you already have, I would add a recent occurrence. A student in my class at McGuire AFB, New Jersey recently addressed the class to relate his experience. He has borrowed materials to develop an automotive technology curriculum. He said, "Call. Ask for Randi. She will learn what you need and see that you get it." He went on to explain that special efforts have been made to have the people in South Carolina who developed the materials provide a test which seemed to be missing. "Randi really went out of her way," he said.

I know of no agency in vocational education which is better managed than ECNCC/IVCC. Becky Douglass is a leader and the other employees are efficient and effective.

(3) One of my favorite features of the Network is the special bibliographies. At SIU-C I work with many special educational and vocational education majors who are interested in specialty areas such as industrial education for hearing impaired or job acquisition training for the mentally retarded. They find bibliographies especially helpful for selecting materials which they borrow and adapt to their needs in various kinds of local agencies. In my work as an evaluation team leader for the Illinois Staff Board of Education, I stress the utility of bibliographies and other functions of ECNCC and IVCC. Many of the recommendations we make to vocational directors and teachers can best be implemented by borrowing network materials.

It is essential that NNCCVTE/ECNCC be funded at adequate levels. Publishing companies are not as effective in vocational education as they are in general education. Technology and jobs change more rapidly. Professionals at the local level must have help from outside sources. What others develop must be shared widely.

NNCCVTE and ECNCC have a short history (11 years) of exemplary service. Knowledgeable professionals applaud them. But, from change theory we know that efforts of this kind do not impact as heavily in their first decade as in subsequent decades. Change in education takes time. NNCCVTE and ECNCC do much to speed change. But, some professionals are slow to change and some shall not change. During this second decade, we shall outlive nearly all vocational education professionals who will not be affected by the networks. That is, a far larger percentage of professionals will utilize various services. The number of inquiries, attendance at workshops, and participation in meetings and teleconferences and impacts on students will increase logarithmically. This is the nature of enterprises closely allied with basic trends in human resource development.

Aside from teachers themselves, curriculum is the major resource of education/training. Professionals in education and training must have opportunity to benefit from the research and development efforts of their peers in all manner of sponsoring agencies. The NNCCVTE and ECNCC have made great strides in this regard. We at Southern Illinois University Carbondale shall be partners in network achievements.

Sincerely,

Ronald W Stadt

Ronald W. Stadt

Judge Watkins
Malcolm X College, Chicago, Illinois

A paper by Judge Watkins, Associate Professor and Medical Laboratory Technology Director, Malcolm X College, presented at an open meeting, "Future Curriculum Development Needs in Vocational Education and Training," October 16, 1983, U.S. Department of Education Region V, Chicago, Illinois.

I am indeed happy and honored to have an opportunity to appear before this hearing panel in order to express my comments regarding future curriculum development needs in vocational education and training. I am, by profession, a Medical Technologist and Educator. At present, I am Director of the Medical Laboratory Technician Program at Malcolm X College of the City Colleges of Chicago. I have been involved in health care all of my adult life. I am presently a doctoral student at Southern Illinois University under the supervision of Dr. Richard Bortz. My concentration is in vocational education with particular emphasis on curriculum development in the area of health.

One of the problems for those of us in allied health at the City College of Chicago is the construction of curricula that satisfies the requirement of the appropriate outside accrediting agency and at the same time fits into the established structure of the college system. Those of us connected with the Malcolm X College Medical Laboratory Technician Program have, for the past few years, made numerous attempts to change our overall medical laboratory technician curriculum in order to bring such curriculum in line with the requirements of the outside accrediting agency and the City Colleges of Chicago.

During the past year, the East Central Network Curriculum Center has offered valuable assistance to us in revising our curriculum. We are still in need of the professional help of the East Central Network in not only developing the detail of the curriculum, but working with us in an attempt to implement this curriculum.

The East Central Network can be of assistance to us in revising our medical laboratory technician curriculum, constructing the clinical laboratory portion of our curriculum, and giving advice as to the implementation of such curriculum into our program and at clinical affiliates that are vastly different. There are a number of new adjacent areas of medical technology that need to be developed, namely: electrocardiography, histologist, phlebotomists and instrumentation. Curricula need to be developed for these areas and the East Central Network can play a major role in the developing of such curricula.

Educators and specifically curriculum developers must play a vital role in the preparation of individuals for the world of work, particularly in times of high unemployment and high underemployment; in times of depressed economy when the call is for integrity and accountability; when there is a need for services; and when the demand is for short-term as well as long-range solutions to perplexing problems.

Individuals desiring employment preparation bring to the educational environment a wide variety of experiences. A system of training must be created which is competency-based and individualized to meet the needs of the diverse students. Individuals and institutions charged with the responsibility of training medical personnel must take into consideration the relevance of a changing society and its effect on the educational needs of such students. Medical education has no choice but to remain responsive to the social forces which shape its destiny. In considering and planning how to produce the most effective medical person, it is essential that curricula be developed that mirror societal as well as institutional and individual needs.

A comprehensive curriculum model must consist not only of curriculum, but of employment skills. To construct curriculum isolated from the employment environment is to construct meaningless curricula. In order to develop curricula which meet the needs of the world of work, one must be cognizant of what actually goes on in the world of work.

Too often, many of us in education isolate ourselves from the world of work due to long standing institutional rules, regulations and policies. We construct curricula which in the long run do more harm than good. The harm is done by systematically closing the academic door on a large segment of our society that is capable, but unable for many reasons, to complete such curricula and consequently unable to enter and enjoy the world of work. Such individuals find themselves able to perform but not allowed to do so in any meaningful fashion.

This client group that has been terrified and injected with feelings of inferiorities by the academic community should, over the next several years, receive the services of the East Central Network. The East Central Network can be a liaison between the academic community, particularly the community college and the world of work. Curricula can be developed under the auspices of the East Central Network that mirror the world of work; thus enabling individuals to perform in a meaningful fashion and enjoy the world of work.

Allied health is in its infancy as a series of developing professions. In order to nurture and develop this infancy, careful curriculum development and implementation are essential. Quite often the process of developing a curriculum is far less involved than its implementation into an existing structure. The various allied health curricula find themselves at odds with the structure in which they are being forced to fit. Sometimes the fit is analogous to forcing a square plug into a perfectly round hole; both having the same dimensions. The square plug being the newly developed allied health curriculum and the round hole being the inflexible rules, regulations and policies of the educational institution.

A perplexing problem facing allied health educators is developing quality clinical experiences. Each clinical institution is different in staffing, financial support, equipment, patient load, etc., and consequently, each clinical institution has its own criteria for offering clinical experiences. The East Central Network can be a liaison between the academic community, particularly the community college, and the clinical facility and can offer continuing education programs, expert curriculum developing advice tailored to solve a particular problem, as well as seminars and workshops. This would enable individuals in smaller clinical facilities an opportunity to learn about expensive equipment available only in the larger facilities.

There being an increased demand for health care and particularly preventive medicine, the federal government is demanding accountability from health care practitioners. Many of these health care practitioners have been absent from the academic environment for some time and are now being required to perform academically. The East Central Network can provide the type of training and retraining needed in order to allow such practitioners an opportunity to meet Federal guidelines.

SCHOOL CITY OF HAMMOND
Hammond, Indiana

TESTIMONY FOR:
Public Hearing for
East Central Network
Curriculum Coordinator Center

United States Department of Education
Region V - Chicago, Illinois
on October 26th, 1983

The Hammond Public School System has provided an extensive secondary and adult education program since 1919 in addition to apprenticeship training programs for local business and industry. Recently, a major renovation and new construction project has been in progress at the vocational education delivery facility at the cost of $13,000,000. A committment of this magnitude by Hammond in the throws of a major recession indicates the high priority placed on training and retraining individuals for employment.

One effort that is continuous at every successful training facility is the "state of the art" curriculum. Over the years, Hammond has used every possible means of locating newly developed curriculum for the programs offered at our vocational facility. Some of the more common sources of vocational curricula that have been used are: Vocational Education Services-Indiana University, Bloomington, Indiana; National Center for Research in Vocational Education-Ohio State University, Columbus, Ohio; and Mid-America Vocational Curriculum Consortium-Stillwater, Oklahoma.

The local effort for curriculum development has included the assignment of a curriculum specialist who is collaborating with present staff members to convert established course curriculum into Performance Based Vocational Education (PBVE) concepts. The local goal is that all vocational programs will be performance-based by 1985.

Now, what can the East Central Network do to assist the local vocational delivery system.

(1) Let every developer of vocational curriculum know that the East Central Network exists and the services it provides.

(2) Have each state develop a directory listing every type of vocational curriculum located in that state.

(3) Have directory include information about availability of curriculum for other interested individuals or institutions.

(4) Listing of occupational competency tests available for purchase.

(5) Listing of occupational "Entrance Standards Assessment Tests" available for purchase.

(6) Collect data from employers that represent occupational clusters which would identify "standards of excellence" for

each specific occupational cluster. Example: What does the construction industry and its union identify as skills that reflect excellence in an employee?

The success of any vocational program is dependent upon a number of factors, not one being more important than an effective and current curriculum. I do not know of any topic that is more "center stage" at this time, due to the recent passage of Job Training legislation, that expects efficient and effective training and retraining of the employed and unemployed.

Contact person: Mr. Andrew M. Adaska,
Area Vocational Director
School City of Hammond
5935 Hohman Avenue
Hammond, Indiana 46320
(219) 932-5700

C. Edward Brown
State Coordinator for Supportive Services
and Program Improvement
(Indiana State Liaison Representative to the
East Central Curriculum Network)

TESTIMONY

Open Meeting on Future Curriculum Development Needs In Vocational Education and Training

The curriculum network has a very important role to play in the development of linkages between curriculum developers and users. The means by which this has been accomplished has been through the facilitation of regional Curriculum Coordination Centers (CCCs). The format under which the CCCs have operated has been as a service provider to the states located in each CCC region. It is under the major intent of the CCC's mission as a service provider to the participating states that will be addressed in this testimony.

Beginning a new contractual period opens up the agenda for suggestions on long range planning of how the CCC can best provide services under limited resources. First it is necessary to determine the instructional materials and curriculum resource needs of the participating states for serving their local vocational programs. Secondly the CCC has to determine the most efficient and effective method of serving those identified needs.

A needs assessment of the local vocational programs' curriculum resource needs should be conducted in the participating states to provide an inventory of curriculum resource. The means by which a needs assessment instrument could be developed and implemented would be through the combined efforts of the State Liaison Representatives (SLRs) and the CCC staff.

During the time in which the needs assessment is being compiled another activity would be undertaken to develop a curriculum personnel resource file. This curriculum resource file would provide a listing of personnel and vocational systems in each of the states that could serve as in-service resources and model sites for the improvement of curriculum development and systematic delivery of instructional materials.

By completion of the activities of determining needs and identifying the best in-service deliverers a functional network contract can effectively serve its membership.

To assist in the utilization of the inventoried information a small grants program could be initiated by the CCC. The establishment of the small grants program by the CCC would make seed money available to the states for the purpose of development or adaptation of curriculum and for assistance in curriculum in-service activities.

The mission of the Curriculum Coordination Center is to provide services to its participating states. With the assistance of the CCC the states can offer their local vocational programs the best instructional materials and in-service information available.

ECN Testimony - October 26, 1983

by

Clyde V. Colgrove
Director of Instruction/Student Affairs
Indiana Vocational Technical College
Northwest Institution

Comments for Consideration

1) Increase the awareness of services that are available and expand these services to the latest State-of-Art
    a) Initiate and sustain advertising program
2) Improve communication within and between states
    a) Establish and enforce reporting system
3) Provide timely high-technology for the post-secondary level
    a) Common complaint - vocational education at the secondary level
4) Increase resource staff to facilitate the above
5) The personnel at our center are helpful, empathic and cooperative, but seldom have available the information requested at post-secondary technical level

Clyde V. Colgrove
Director of Instruction/Student Affairs
Indiana Vocational Technical College
Northwest Institution

Ed Cory
SLR - East Central Network
Lansing, Michigan

I have some remarks I would like to introduce as testimony myself, as well as three letters I managed to collect from people in Michigan who utilize the services and products of the ECN.

One of the things we have come to realize, I think more and more in Michigan, is that curriculum is in fact the foundation of everything else we do. That has not been without its problems. It is a blessing and a problem because I happen to be the project monitor for our curriculum development and dissemination project. A few years ago everyone left me alone. Now, all of a sudden, the secondary people in program approval are saying "What do we have to know about curriculum before we can approve new equipment pruchases?" or "How does curriculum impact facility design?" or "What does curriculum mean in terms of inservice training?", and so on and so forth. Now I am managing a project that has 15 co-monitors which makes it a real ball in terms of trying to keep that thing together. But, we are in fact realizing more and more that curriculum is the foundation of almost everything we do. Because of that we are getting a tremendous amount of interest in it in Michigan.

As far as we are concerned, networking is essential because all the talk aside, the bottom line is that if we didn't network we couldn't afford to develop curriculum. It is too expensive to develop without some kind of networking system. There is no alternative. You simply cannot afford to do it and states cannot afford to unless we have some kind of networking system that lets us have access to what other states are doing.

I am sure all of us have read Megatrends since that seems to be the "trendy" thing to do these days. Naisbitt makes a very strong argument for the concept of networking. I would agree with that very definitely when it comes to curriculum.

There are a number of other items that I think are well worth mentioning in terms of the benefits we have derived from networking. One of them is the regional meetings. This hearing is testimony that regional meetings have a very definite benefit for the individual states involved when it comes to networking. The interchange with the other people at the regional meetings from other states, all the spinoffs that occur from that, and the general contacts with people are some of the benefits. We find that we do not necessarily discuss only curriculum but a lot of curriculum related kinds of things. An example would be how do other states handle the CIP code system. We have gained a lot from the formal presentations at regional meetings.

We have always received what I would call prompt, high-quality and courteous service from the ECN whenever we have made requests. I think last year through our curriculum resource center in Michigan we conducted over 300 searches of curriculum material for local education agencies, community colleges and secondary school systems. In almost every case we go through our own holdings to the facilities we can access through the networking system. That has been very successful for us.

The big problem, I think, with networking is that most people do not know about it or are not aware of it. What happens in Michigan when a teacher requests something such as a curriculum guide on auto mechanics is that I contact our resource center. They make sure that the person gets the curriculum materials that they need. They may send that person five different curriculum guides. If I talk to that person two weeks later I say, "Did you get the materials?" They reply, "Yep, thanks a lot." I then ask if they know where they got the materials and the answer is "No, they just came in the mail."

I think it is too much to expect that every person who receives or uses a product from a resource center or some kind of networking system is suppose to know what the network is all about or how it functions, etc. Sometimes we receive bad press because of that--because people say "No, I never heard of that." We may have furnished them with a hundred curriculum materials over the last year but they never heard of the resource center and have no idea where it (the materials) came from. That is something we have to keep in mind in terms of evaluating the services and products that we deal with through the networking system.

In terms of curriculum I should mention high technology. Having mentioned high tech, I will go on to some other things.

I have a very real concern about the question of basic skills. I have a personal opinion which I have found is shared by a number of people who deal with vocational education on a day-to-day basis; i.e., local teachers in both secondary and postsecondary institutions and their administrators. I am not sure but what we expect our vocational students to possess the basic skills that are necessary to enter and to successfully compete in occupations. I am not sure that we can rely on the academic portion of our educational system to provide those basic skills. As a matter of fact I am pretty well convinced that we cannot. We never have been able to. I do not see the academic community suddenly doing a 180 degree turn and saying, "What can we do to help you folks in terms of the basic skills?" For that reason, I think that one of the primary things we have to work on in terms of the network is the consolidation and development of basic skills materials. We have some very good places to turn for that type of thing in terms of handbooks already produced. The Department of Labor has produced such materials as the VPO with its associated CIP/DOT crosswalks. There is general education development aptitudes and interest abilities associated with those occupations based on their surveys for the Dictionary of Occupational Titles. I think we are going to have to do the job if it is going to be done.

Microcomputer use! We have a computerized curriculum access system in Michigan. The access system is available to anyone who has a microcomputer. They can call up the system and see all of our holdings scroll on the machine or they can get a print-out. They can place their order for materials from our resource library through the microcomputer. We have approximately 60 users from a potential of 6,000. If you narrow that to one person that serves as the curriculum representative at each vocational area center, you are talking about 350 people in Michigan who could access that system. When we asked the people who don't use the system why they don't use it, they say "I don't have access to a micro." The people who say they do use it are our Vo-Tech

Specialists whose offices are within the Intermediate School District offices. All of the ISD offices have micros. When a person says they do not have access to a micro, what they mean is that they do not have one right next to them in their office. It means they have to walk a half block down the hall to get a key from somebody to get into the room where the micros are, or they have to negotiate with the data processing person in order to use the micro. This concerns me because of the push or emphasis on micros and high technology. What this means is that people think "No, I don't have access to a micro so I can't access your system."

What they really mean is if micros are truly as personal as they say they are I want one right next to my desk. When I get my own micro with a modem on my desk then I can tie in and I have access. That's very much a concern of mine; because when people talk about access does not mean they absolutely do not have access. It may be inconvenient or highly inconvenient to get to that micro. I think that is something else we have to work on in terms of what we are doing on the local level.

I would like to introduce these letters since I am down to a minute. I have talked more than I thought I did. One of the letters is from a person who coordinates our curriculum resource center and the other two are from local vocational educators who work with teachers and administrators every day.

Thank you.

MICHIGAN VOCATIONAL EDUCATION RESOURCE CENTER
133 ERICKSON HALL • MICHIGAN STATE UNIVERSITY • EAST LANSING, MICHIGAN 48824 PHONE • 517/353-4397

October 20, 1983

Dr. Ed Cory, SLR
Michigan Department of Education
Vocational-Technical Ed Service
P.O. Box 30009
Lansing, MI 48909

Dear Dr. Cory:

It has come to my attention that the National Network is seeking funding for continuation of its mission. As a state center, the Michigan Career Education and Vocational Education Resource Center relies strongly on the network for services in curriculum development and dissemination. These services would be time consuming and virtually impossible to perform alone as a state center. For example, by establishing a link with the East Central Curriculum Network, our outreach capacity has increased considerably in the area of data base searches, requests for fugitive materials and task lists.

Today more than ever before, because of limited funds, decentralization and the need to network with other agencies is a must. Michigan was invited to present their computerized loan system at the National Network Conference in Oklahoma last July. It was not our presentation that made us more informed when we returned to Michigan, but what was shared with us by other states and territories that made our exchange network so rich in resources, i.e. human, print, and audiovisual curriculum materials.

The establishment of a National Curriculum Network in the 1970's was ahead of its time as now evident in the new information age. We cannot afford to go backwards and utilize resources in our own areas. Three years ago we were only able to serve 60-70 school personnel for curriculum requests. Today because of the NNCCVTE's initiating the Bibliographic Retrieval Service in state centers, we have accessed well over 300 library searches for clients in Michigan.

Our SLR's role in the network demonstrates that curriculum is and should be a high priority for educating today's youth for tomorrow's jobs. Developing linkages with other state centers through the Network allows us to adapt or adopt curriculum from other states, rather than duplication of effort.

Call Toll Free in Michigan 1-800-292-1606

MSU is an Affirmative Action/Equal Opportunity Institution

The NNCCVTE is involved in the distribution of resources in all vocational subjects; it does not emphasize a few as do other organizations involved with vocational education. Please consider the multiplier effect a national network has when you foresee the number of clients a state center serves via a strong support system such as the NNCCVTE.

Sincerely,

Gloria Kielbaso

Gloria Kielbaso
Coordinator

me

MVCL

MICHIGAN VOCATIONAL CURRICULUM LEADERS
"LEADING LEADERS IN LEARNING"

OCT 04 1983

October 3, 1983

Dr. Ed Cory
Vocational-Technical Education Services
Michigan Department of Education
P.O. Box 30009
Lansing, MI 48909

Dear Dr. Cory:

The term **networking** is much overworked and at times misused. However, in matters concerning curriculum development and dissimination by the national network, the term is most appropriate. The communication process that has evolved through the network is most valuable to maintaining relevant and up-to-date vocational training programs. At a point in time when agencies providing vocational-technical education must survive on a slim budget in the face of dramatic changes, if not a revolution in technology, the sharing of curricula and ideas is critical.

Equipment used in many training programs has suddenly become obsolute; teachers need retraining to up-date their technical skills and knowlege; curriculum, the heart of any training programs, needs to be updated to reflect new techniques and skill in the operation and maintenance of new equipment; the numbers of people who will need retaining is increasing while the capability of facilities to train is decreasing; and furthermore, these needs must be met now, today.

The East Central Network for Curriculum Coordination as it has grown and developed now offers vocational-technical education a process whereby curriculum updating can be timely and cost-effective. I believe that Michigan proudly represents an example of how curriculum can be developed and disseminated through a networking process. Although our branch of the network might be considered in its infant stage and has yet to reach its potential, the impact of networking has been effective. I am also of the belief that the impact of past and future efforts will be lessened should funding to the national network be curtailed.

Therefore, in view of today's challenges, I would be appalled and would consider foolhardy any action to lessen the services and effectiveness of the East Central Network for Curriculum Coordination or any other portion of the national curriculum coordination network.

Respectfully,

Betty Leavitt

Betty J. Leavitt
President-Elect

President
Howard Napp
Kent Skills Center
1655 East Beltline
Grand Rapids, MI 49505
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KENT
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OCT 04 1983

September 30, 1983

Dr. Ed Cory
East Central Network State Laison
Michigan Department of Education
P.O. Box 30009
Lansing, MI 48909

Dear Ed:

Curriculum resources and leadership are critical for an Area Vocational Center to offer training that remains viable and timely. The East Central Network For Curriculum Coordination has been an excellent resource for our organization to utilize.

The network concept must be continued as a top priority. Kent Skills Center has utilized task lists, curriculum guides and other curriculum materials on numerous occasions. To be able to access what other Vocational-Technical Educators are doing across the region and the United States, is a tremendous asset.

Michigan's efforts in developing Instructional Curriculum Program Guides has been aided by the Network. We in turn have served as an excellent resource to other states.

In my capacity as a Curriculum Manager in a comprehensive Area Vocational Center, I am strongly in favor of continuing the Network. Also, in my capacity as President of The Michigan Vocational Curriculum Leaders, I urge continued funding of this fine effort.

The goals that the Network has implemented, need to be given continued priority. Those of us on the "Firing Line" need this support to continue our Curriculum Leadership. Please feel free to call on me for further assistance if needed.

Sincerely,

Howard Napp

Howard Napp,
Program Manager Instructional Services
Kent Skills Centers

A Service Of — **Kent Intermediate School District,** 2650 East Beltline S.E., Grand Rapids, MI 49506

Phone: (612)633-1103

Educational Operations Concepts, Inc.

1773 Skillman West
Saint Paul, Minnesota 55113

October, 1983

STATEMENT ON FUTURE CURRICULUM DEVELOPMENT NEEDS IN VOCATIONAL EDUCATION AND TRAINING

(Prepared by Fred C. McCormick, Ph.D., President, Educational Operations Concepts, Inc., Saint Paul, Minnesota, for the October 26, 1983 Public Hearing, sponsored by the East Central Network for Curriculum Coordination Center with U.S. Department of Education Region V, Chicago, Illinois.)

Educational Operations Concepts, Inc. (EOC) is pleased to have been invited by Rebecca S. Douglass and Dr. Ruth V. Patton to participate in this hearing. Although it will not be possible to be in Chicago to submit oral testimony on October 26, 1983, I wish to submit this written statement, the content of which is based on nearly thirty years of education-related professional service. The last ten years have been involved specifically in performing thirty-four studies, projects and other consultations with sixteen different local, state and regional vocational education agencies/organizations within the East Central Network's Region. (A listing of these major clients and consultations/reports follows the statement.)

EOC has utilized the excellent resources of the East Central Curriculum Coordination Center (ECN) and of the various Vocational Curriculum Centers in a number of the states within the East Central Region. We have also been in touch with the five other Centers comprising the National Network, in performing projects. EOC also conducted a presentation on articulation in vocational education as part of a regional meeting for State Liaison Representatives when the ECN meeting was held in Saint Paul, Minnesota during April, 1980. At that time, EOC was completing a Comprehensive Study of the State-of-the-Art of Articulation Efforts in Vocational Education: Present and Future Implications for the State of Illinois. As an organization, EOC relates to all of the populations served by the East Central Network, including state education office personnel, teacher trainers, curriculum developers, business/industry groups, teachers andothers involved in the training of employees or people entering the work force. In our work we have been able to gain perspectives on curriculum coordination networking, which are stated as strengths and as considerations for future planning.

A number of strengths are indicated:

. The concept of the National Network for Curriculum Coordination in Vocational and Technical Education and its six coordination centers has remained viable and strong since its establishment in 1972. The U.S. Department of Education is to be highly commended for its design and support. The East Central Network, as the largest of the six Curriculum Centers, stands as an exemplification of the cooperative efforts of twelve states with good support by the State Directors of Vocational Education and the Illinois State Board of Education, which houses the Center.

- Curriculum coordination in vocational education continues to be a major force toward the articulation of vocational education: secondary, post-secondary and adult.

- The State Liaison Representatives (SLRs), appointed by the respective State Directors of Vocational Education for participation in Network activities, stand as the key links in sharing curriculum development products and services. The capacity-building potential of a state resides in the functioning of the SLR. The SLRs are the "connecting points" of the Network, assisted by the Regional Network Center and The National Network, providing leadership in marketing and work program development. The East Central Network recognizes the variety of governance and administrative patterns which exist among the twelve states of the East Central Region for the delivery of vocational education programs and services, as well as the variety of SLR appointments either within or beyond the state vocational education agencies.

- The ECN Task List Catalog and Curriculum Terminology as a tool are examples of good developments designed to meet the needs of people involved in vocational education and training. These products have been found helpful, generalizable and transportable.

- The ECN recognizes that the "bottom line" of curriculum coordination must be the fostering of capacity-building for vocational educators, particularly for teaching personnel, in local education agencies.

Considerations for future ECN planning are also indicated, and primarily involve the functioning of the SLR as the key link in the network dedicated to serving as the informational "pipeline" to local and state vocational educators and others:

- The SLR is typically a very busy person within his/her agency, with the ECN function being only one of the items in his/her job description. Thus, it is extremely important that the ECN provide as much support as possible to the SLR in such areas as work program and marketing strategies, orientation to the ECN and the National Network (preferably within the state of each SLR), promoting procedures for ease of access of materials, and in maximizing ways in which the SLR can familiarize himself/herself with new materials. Any implementation and assisting strategies which can help the SLR be familiar with existing and new resources, as well as with their application within the state, will maximize utilization of ECN and National Network resources. The SLR needs to view Network-related duties as more than secondary in importance and with a "real sense of ownership" as each state contributes time and effort beyond actual monetary resources toward common objectives. The increased use of technologies, including computerization of content, should assist in the SLR linkages.

- Some amount of quality control by the ECN in determining the usefulness of a curriculum development to be disseminated will also continue to be helpful to the SLRs in their states. At the same time, the many diverse needs of the ECN Region need to be recognized.

- Most studies which have served to investigate the linking of curriculum research and development with local school practices and instructional capacity development have found that curriculum-related products are associated with significant instructional benefits when two conditions exist, i.e. 1) they are carefully selected by practitioners to match local conditions and needs, and 2) when technical assistance and inservice training required to master use of a new product are readily obtainable. This is all more easily said than done during these times of "too much month at the end of the money". Yet, curriculum adoption/adaptation strategies depend on personal services of both developers and/or trainers, and competent personal services have some costs associated with them. Often, good curriculum products get "almost but not quite" to their intended destinations for lack of one or both of these two conditions.

- Likewise, strategies for sharing new local curriculum developments with the Network, via each state probably need further consideration. "Show and tell" is still one of the best and most cost-effective types of inservicing activities available. The SLR is, again, the key to making this happen within a state.

- The reauthorization of the Vocational Education Act of 1963, to be accomplished by September, 1984, will need to include considerations of curriculum coordination and networking within its scope. Perhaps one of the most useful activities that might happen in the year ahead would be an impact assessment of a Regional Network, such as the ECN, in terms of its relationship to the National Network and to its capacity to assist local education agencies, through the states and their functioning State Liaison Representatives.

The foregoing statement has been prepared in the spirit of helpfulness to the ECN and the National Network. Best wishes for good success during this second and critical decade of service to vocational education in the United States.

Educational Operations Concepts, Inc. (EOC)
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Saint Paul, Minnesota 55113
(612) 633-1103

MAJOR CLIENTS AND CONSULTATIONS/REPORTS OF EOC PRINCIPALS: STATE AND LOCAL VOCATIONAL EDUCATION AGENCIES IN THE EAST CENTRAL NETWORK REGION

. *Bartholomew Consolidated School Corporation, Columbus, Indiana*

Development of a Mechanical Drafting V-TECS Catalog, 1981-82.

. *Bemidji State University, Bemidji, Minnesota*

Evaluation of the Vocational Curriculum Planning and Research Program, a Cooperative Interagency Project, 1981.

. *College of Lake County, Grayslake, Illinois*

Consultation to Regional Career Guidance Center (Lake County), 1981.

. *Illinois State Board of Education, Department of Adult, Vocational and Technical Education, Springfield, Illinois*

A Third-Party Evaluation to Assess the Impact of the Quality Assistance Plan (in Illinois Vocational Education), 1983-84.

A Comprehensive Study of the State-of-the-Art of Articulation Efforts in Vocational Education: Present and Future Implications for the State of Illinois, 1979-80.

A Study to Evaluate the Nineteen Regional Career Guidance Centers within Illinois, 1979.

Third-Party Evaluation of the Illinois Experience-Based Career Education (EBCE) Project, 1976-78.

A Comprehensive Needs Assessment Study of Vocational and Adult Education Programs and Services within Illinois (including Balance of State (CETA) and Governors Manpower Office), 1976-77.

Third Party Evaluation of the Comprehensive Illinois Occupational Education Demonstration Centers, 1973-76.

. *Illinois Vocational Association, Springfield, Illinois*

Workshop on Articulation in Illinois Vocational Education, 1981.

. *Indiana State University, Terre Haute, Indiana*

Development of an Accounting V-TECS Catalog, 1981-83.

. *Joliet Junior College, Joliet, Illinois*

Technical Assistance and Evaluation for "Establishing a Hotel/Restaurant Food Service Management Degree and Culinary Arts Program in a Conference Center", 1981.

Technical Assistance Relating to a Planning Model for a Hotel/Restaurant Program and Educational Center in an Urban Area, 1979-80.

. *Minneapolis Public Schools, Minneapolis, Minnesota*

An Area Vocational-Technical Institute Feasibility Study: Program Planning for an Area Vocational-Technical Institute in Minneapolis, 1974.

. *Minnesota State Department of Education: Vocational-Technical Division, Saint Paul, Minnesota*

Preparation of Orientation Manuals for On-Site Evaluation Team Members, Program Area Team Leaders, and Local Administrators (in Minnesota Post-Secondary Vocational Education), 1981.

Technical Assistance to Develop a Formula to Disburse Vocational Federal Funds in Minnesota According to Public Law 94-482, 1980-81.

Technical Assistance to a State-of-the-Art Study: Industrial Arts/Secondary Vocational Industrial Occupations, 1980.

Technical Assistance Related to a Monitoring/Feedback System for the Minnesota Secondary Placement Specialist Program, 1979.

A Study of the Organizational Structures and Management Systems of Four Special Projects: Minnesota Instructional Materials Center, Vocational Student Organizations Center, Statewide Curriculum Articulation Center, and Vocational Agricultural Coordinators, 1979.

Development of a Minnesota Industrial Arts Study, 1978.

Technical Assistance in a Health Occupations Education Study, 1978.

An Area Agriculture Coordinators' Study (in Minnesota Vocational Agriculture): Organization, Management and Financing, 1976-77.

Minnesota Statewide Adult Vocational Program Funding Models, 1973-74.

. *National Computer Systems, Minneapolis, Minnesota*

Technical Assistance for the Minnesota Vocational Follow-Up System, 1975-76.

. *Project PREP, a consortium of Joliet Township High Schools, Lockport Township High School, Valley View Public Schools, Will-Grundy Counties CETA Services, and the Educational Service Region in Will County, Illinois*

Technical Assistance to Project PREP, a Project for Pre-Employment and Placement, Will County, Illinois, 1978.

- *Saint Paul Public Schools, Saint Paul, Minnesota*

  Third-Party Evaluation of the Saint Paul-Minneapolis Career Education Project, 1975-77.

- *Seven South Central Minnesota School Districts, including Faribault and Owatonna*

  Vocational Education Needs Assessment in South Central Minnesota, 1976.

- *State of Indiana, State Board of Vocational and Technical Education, Indianapolis, Indiana*

  Development of a Business Education V-TECS Catalog, 1980-82.

  A Preliminary Assessment Relating to Indiana Vocational Education Information System Capabilities, 1978.

  Technical Assistance to Development of an Alternative Statewide Management System for Vocational Education using Regional Planning for System Design, Implementation and Field Testing, 1977.

  Third Party Evaluation of the Implementation of a Statewide Guidance Program with Emphasis on Counseling, Placement and Follow-Up, 1973-74.

- *University of Minnesota, Minneapolis, Minnesota*

  Workshop on Alternative Sources of Funding and Proposal Preparation, 1980.

- *Vincennes University, Vincennes, Indiana*

  Technical Assistance to an Indiana State-wide Survey in Printing for Performance-Based Vocational Education, 1982-83.

  Development of a Printing V-TECS Catalog, 1981-83.

Roy Bohn, Instructor
Four Rivers Area Voc-Tech School
Washington, Missouri

A large part of many teachers' problem in updating curriculum is knowing what already exists and how to access materials in other parts of the country. Awareness of and availability of materials used in industrial training settings are also not easily available.

More teachers ought to be aware of the services available through the curriculum service centers. I have found the materials and helpful staff at the East Central Curriculum Coordinating Center to be extremely beneficial.

One item which would be of immense value is an UPDATED bibliography of existing curricula, reference materials and AV aids. Inclusion of the same type of materials from industrial training settings should be included. Since the great amount of time and money required to collect such a resource limits the frequency with which such publications can be printed, I suggest such efforts be available on a microcomputer floppy disk to ease duplication costs and periodic updating.

I would like to see the curriculum and reference materials, including slide/tape support materials, developed. (If some of these already exist, I am unaware of them.)

AREAS OF NEED:
1) Machining "New" Materials

Speeds/feeds
Cutting tool materials & geometry
Different coolants
Composites

Plastics
Aluminum
Alloy steels

2) Computerized Machining NC/CNC/DNC

Overview (including slide tape) explaining
  Basic programming
  Advantages/Disadvantages over Conventional Machining
  Types of job opportunities
  Skills required

3) Overview New Metalworking Processes

Chemical
EDM
Laser
Powdered Metallurgy

Reasons for usage

4) Automated Machinery Maintenance

Set-up/Diagnose/Adjust/Trouble Shoot/Repair
Must cover DC Serve Motors/Electronic Controls/Fluid Power

Roy Bohn

Tom Hindes
Columbus, Ohio

This is Tom Hindes, former SLR from Ohio, currently serving as the College of Education, Business, and Industrial Training and Training Development Coordinator for Ohio State University.

I would like to make some comments concerning the regional curriculum network and I think that these comments should be the Ohio's position to offer support to the regional curriculum network concept. The following points have been identified as positive aspects to reinforce the continuance of the regional curriculum center.

The East Central Curriculum Network and the other Regional Networks with their coordinated efforts are really the only nationally organized, regionally coordinated, and locally controlled curriculum instructional materials organization available in the United States. Within this system the ECCNC is a vehicle that fosters professional and personal contacts between states regarding vocational curriculum concerns. Of course this is done through the electronic curriculum searches and personal communications and there is a constant spillover in other vocational concerns and areas not just in the area of curriculum and instructional materials.

The Network promotes the exchanging of information and materials nationally and regionally among educators. It also provides a capacity for joint curriculum development projects. It promotes cost effectiveness when states utilize the system of locating and acquiring materials for adaption or adoption rather than new curriculum development.

The Network can be utilized to disseminate and collect information in a highly efficient and effective manner, and the Network could be a highly efficient and effective method to disseminate the results of all national research and development projects because the Network could assure that the materials could get into the appropriate hands of the state and local level.

The Network assists in eliminating narrow and parochial thinking on the part of states by providing means and methods of out-of-state travel in the sharing of ideas. The Network provides a sounding board or a forum for individual's ideas to be discussed and implemented. It provides standards and criteria for curriculum development. It provides a fast and effective means of problem solving when member states address common problems and challenges. And it is an excellent buffer between the state and the federal programs.

And indeed, it is the state's system to alert them of impending or pending agendas which the states need to be aware. The network can be utilized within a state as a position of strength to gain justification and acceptance of proposed projects for changes in state procedures.

It is a source of specific experts for specific project involvement and the network can promote and showcase exemplary programs and practices in the area of curriculum. It would seem that just as these past aspects are important, there are some future things that the National Network can and should be involved in. One of these would be to put together national programs based upon the national priority topics and items for workshops and seminars for the member states, and to provide monies for the technical assistance for member states.

There is a desperate need for information. The Network could provide quarterly, or more frequent if deemed necessary, communiques with curriculum information to the member states. The number of states could integrate or utilize this information into their curriulum and dissemination system.

Ohio's position regarding the continuance of the Regional Network Curriculum Coordination Center.

October 25, 1983

Dr. Darrell Parks
State Vocational Director

Robert Balthaser, RCU
State Department of Education, Vocational Division

Joyce Keefer, Acting SLR
State Department of Education, Vocational Division

Tom Hindes
Former Ohio SLR
The Ohio State University
Business and Industry Consultant

The East Central Curriculum Network is the only nationally organized, regionally coordinated, and locally controlled curriculum/instructional materials listing coordination available in the United States.

The ECCN acts as a vehicle to foster professional and personal contacts between states regarding vocational curriculum concerns:

- electronic searches;
- personal communications;
- constant spill over in other vocational concerns;
- promotes exchanging of information/materials nationally and regionally among educators;
- promotes cost effectiveness when states utilize the system of locating and acquiring materials for adoption or adaption rather than new curriculum development;
- can be utilized to disseminate and collect information in a highly efficient and effective manner;
- could be highly efficient/effective method to disseminate the results of National Research and development projects because the network could assure the materials getting into the appropriate hands at the state level;
- assists in eliminating narrow/parochial thinking on the part of states by providing a method/means for out-of-state travel and the sharing of ideas;
- provides a sounding board or forum for individual's ideas to be discussed and implemented;
- provides standards and criteria for curriculum development;
- provides a fast and effective means of problem solving when member states address common problems and challenges;
- is an excellent buffer between the State and Federal programs. Can be the states to alert states of impending/pending agendas in which the states need to be aware;
- can be utilized within a state as a position of strength to gain justification and acceptance of proposed projects or changes;
- is a source of specific experts for specific project involvement;
- can promote/showcase exemplary programs and practices in the area of curriculum;

Future projects that could be provided by the curriculum network which would be beneficial to vocational educators would be to:

- put together National programs of National Priority topics and items for workshops and seminars for member states;
- provide monies for technical assistance for member states;
- provide quarterly (or more frequent) communique with curriculum information for member states to integrate or utilize into their curriculum dissemination system.

October 26, 1983

CURRICULUM TESTIMONY

by
Vernon L. Register
Pennsylvania SLR

I hope my comments are helpful although I have only been a vocational educator for a few months. Hopefully, my general curriculum background and virtual "outside of vocational education" perspective may assist your efforts.

When I came to vocational education approximately one year ago I was given a desk and stacks of paper to read. I read six to eight hours a day for weeks and became my neighborhood's largest consumer of Murine. The clerk at the pharmacy told me the other day that I still hold the neighborhood record.

As I read, I was impressed with the enormous amount of curriculum materials that had been generated by vocational educators. A lot of it was good, very good in my opinion. After several weeks of reading I came to the conclusion that vocational education exceeds general or academic education in the quantity and quality of curriculum materials available to teachers and administrators. The past several months have further strengthened that opinion.

During my reading, I also became aware of large numbers of curriculum duplications. As I looked closer at curriculum guides with similar titles, it became evident that most were developed without reference to common material. Most had been developed "from scratch" and were first generation curricula. Very few second generation or revised and updated guides based upon previous work did I find. I discovered that technical manuals are revised much more often than curriculum, even though curriculum uses technical content as its core.

The point that I am attempting to make is that as technical information materials and equipment changes, it is crucial that curriculum be changed to accomodate the new technology. However, most curriculum when changed is revamped from the ground up and a lot of energy and resources are used rehashing the part of a curriculum that did not need to be revised.

Technical manuals are the content or "what" if you will; the remainder of a curriculum as we know deals with the "delivery" or instruction and evaluation for the "what." The need is to change only that which is effected by the "what" -leave the rest alone unless a better way of teaching the basic "what" is found.

I believe that the Vocational Technical Education Consortium of States (V-TECS) is taking the right track as far as the "what" is concerned. I think the Mid-America Vocational Curriculum Consortium (MAVCC) and Oklahoma are taking the best route for the delivery and evaluation. Neither is perfect but the first, second or tenth attempts at anything seldom are; that is the reason revisions and changes are necessary in the first place.

I think quality competency based curriculum guides consisting of valid content, delivery and evaluation should be identified by experts - incumbent workers for the content, educators and students for delivery and evaluation - with states left to alter, adopt or annihilate the guide as seen fit.

The inherent suggestion is not entirely new. States have altered or adopted curricula from other states for many years. What is new in my suggestion is a different leadership role for the curriculum centers.

I suggest each center coordinate development of competency based curriculum established upon incumbent worker validated content. Coordination would be needed to avoid duplication in new curriculum development or revision of content, delivery or evaluation processes. Vocational curriculum would have a single set of vocational guides available for adaptation or adoption by states or local education agencies. Regional curriculum centers would be responsible for dissemination and utilization activities ranging from collecting and cataloging resource materials, to inservice workshops, to identifying model programs using the curriculum.

I am not suggesting a national curriculum. I am suggesting sifting through, evaluating and identifying curriculum with valid content, effective delivery and evaluation processes. We have to start utilizing the best of our efforts more. We cannot afford the luxury of duplication any longer; nor can vocational education use valuable time and shrinking resources to develop and revise curriculum from scratch. We should use what has been done, imperfect as it is, and make the necessary changes as we attempt to keep pace with the technological changes occurring in industry and education.

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October 25, 1983

Dr. Ruth Van Patton
Curriculum Coordinator, ECN/IVCC
Sangaman State University, E-72
Springfield, IL 62708

Dear Dr. Ruth Van Patton:

Mr. Vernon Register, Pennsylvania's State Liaison Representative (SLR) for the East Central Network for Curriculum Coordinating, invited me to present testimony at the ECN-US Department of Education Region V public hearing in Chicago on October 26, 1983. I explained to Mr. Register that I would be unable to appear in person but would be happy to present written testimony.

My concern centers on the area of enhancing the transportability and use of curriculum materials, specifically, curriculum implementation. My personal observation is that we are rich in curriculum and related training materials. Indeed, millions of dollars have been spent in the development of vocational curricula. Thousands of individuals, however - administrators, curriculum coordinators, change agents - who have implementation responsibilities are now asking such questions as: How can successful implementation be accomplished? What are the barriers and hazards in implementing a curriculum? Where do we start? What roles will various individuals play?

Among the goals of the ECN is "... increasing the transportability of curriculum materials and improving their acceptance and use." The ECN must direct its attention to identifying and disseminating strategies for planning and carrying out more effective curriculum implementation efforts. The decision by a school district to adopt an innovation (i.e., a curriculum) carries with it no guarantee that the innovation will actually be implemented at the classroom level. In fact, the Rand Change Agent Study of Title III and Title VII (Berman and McLaughlin, 1978) determined that organizational influences on the innovation are at least as crucial as the innovation itself and that activities and interactions that occur at the local level, regardless of the type of innovation, determine whether the implementation will succeed or fail.

Individuals with curriculum implementation responsibilities need to be made aware of the context within which new curricula become viable. As a major disseminator of vocational technical curricula the ECN can play a significant role in seeing that this is achieved.

Sincerely,

Thomas J Walker

Thomas J. Walker, Associate Professor
and Director of Instructional Programs

TJW:blf

Kay Brown
SLR, Richmond, Virginia

This is the first time in vocational education that I have learned how to hand out a written summary later on. I want to give you a little of my background and why the curriculum network is so important to me.

I was trained by the pioneers in curriculum and it has been a real revelation to see the changes through the years. I don't think a lot of people have had that opportunity to be trained by some of the early people who did it. Because then we did it off the top of our heads and on the paper bags and whatever we could find, and we had wonderful workshops with teachers every night and so on. How wonderful it is now to have this modern network for whatever new things we want to do and whatever improvements we want to make.

Those of us in the old days would never have dreamed that we could have had this type of thing. Mary Marks who had the original concept of this national network was my teacher and her teacher in turn was the first pioneer in curriculum development. Then I worked with Betty Simpson, so it has really been fascinating to see the system develop. I want to just summarize some things that have been important to Virginia as far as what the Network has already done and then I would like to throw out some mind boggling concepts of possibilities for the Network in the future. Of course, that is the type of thing that we will be evaluating in our meeting.

It has been very important to Virginia to get information about trends in vocational curriculum development through the Network. The national searches have been most helpful. I think all the efforts to define curriculum terminology have been most helpful. But, I don't think we will ever finish that job. We end it with new comments, new parts, new concepts; so we need to keep on with that.

Certainly, the technical assistance regarding the use of software and hardware has been most helpful. I think every state is going to have troubles and problems with access to it. I know we have had all kinds of problems by getting enough inservice for the staff as far as use of the microcomputer is concerned.

The problems toward the development of a curriculum format has been extremely helpful. I do want to mention that we are experimenting with what we call levels of curriculum development in Virginia with the idea that V-TECS would be the foundation level. What we call Instructional Resource Guide is a framework or next step approach. A third level is the fully developed curriculum with all the handouts, visual aids--everything that you need to keep up. In other words, the complete survival kit including the instructor's own lesson plan. There are different formats for each level and I think there are sub-levels but that is too mind boggling right now to get into. So there is not and there never would be one format that is perfect for all the needs that we have.

In addition we are finding that the program services have different format needs. I am not saying that you cannot have a common base because we do. But the nature of the fields served by it must be considered. I had eight program services including special programs and there is a difference in the nature of the fields that causes differences as far as format is concerned.

I think another asset of having the Network is the wonderful opportunity for the State Liaison Representatives to meet together, have group therapy and find that somebody else has the same kinds of problems that you do.

I want to tell you a really unusual experience we've had in Virginia. We have had a terrific printing problem simply because of bureaucratic type things but we are trying to overcome that problem. I understand a lot of other states have that problem too. Our business education service decided that assessment materials were the most important to them in competency based education with the implementation of that. So they purchased certain materials from Florida, but they wanted to re-package those materials in a way that was more useable to them in Virginia. I could not get this printed because we needed something like 2,000 copies and 750 copies is one million impressions. I am in the traffic management business about how to get all this distributed to where it is going. Because of our hangups I had to go to Texas to get it printed. But I would not have been able to do that if we had not had the type of cooperation that we had. It helped that I use to work for the University of Texas in curriculum. All of this was possible because of the interest in tri-state and the multi-state cooperation. What a beautiful example of networking.

I was desperate. If both Florida and Texas had not helped us out, I would not have been able to come up with this product and I certainly hope to share the product. It is a business education, three level design type of thing that shows all the competencies ever needed. Not ever needed--but presently identified in business education with a matrix which shows exactly at what point they should come in. Then there is an assessment sample for every single one. And we had to write a lot of publishers to get permission to use that.

Now to look at some of the things that are possibilities in the future. We are experimenting with inservice projects because program services are responsible for their own inservice. It's such an overwhelming job to get those materials packaged that we are doing packs which I am going to show you later. It is called "Task Analysis from V-TECS to Lesson Plan." We take the instructor all the way through and then show them. You know, I don't think you can be too concrete for inservice. We hope to implement a chain of training. We have not been able to train vocational directors to the extent that we would like to. They have such varied backgrounds which causes another problem about getting an inservice pack that's applicable to all. These inservice packages, we find, are a natural outgrowth of curriculum. Without it they won't know how to use it.

I think that there is a need not only for an identification of articulation from secondary to postsecondary but all the way from elementary. An example would be the program of home economics. We need articulation from elementary to high school then high school to postsecondary then so on. We are having problems with the community college structure because their courses do not provide the right containers for articulation from the secondary structure. I don't think we're the only state that has that problem.

Another possibility I see is identification of evaluation of criteria for curriculum material, nationally, and that might be by public service. I do think that there are basic considerations like CBE, format, criterion reference measures, the objectives, the right format and that type of thing. Must consider whether or not it has been validated. There are peculiarities of fields that need to be reflected in your own evaluation materials.

If we could discover a way for the combination of hard copy and micros that would enable the Network to do more central dissemination for us where we have these printing problems I think that would help more than any other one thing to get curriculum distributed. In this problem of updating we have got to determine some kind of system that almost comes automatic as far as updating of curriculum is concerned. It is an overwhelming task. It's an overwhelming task to get it developed to begin with. It's even more overwhelming to keep it updated.

We are experimenting with some things. For example we are packaging by enabling objectives which means you can take an enabler because it is complete. I don't mean it is a LAP or self-contained module but it's a package for a teacher. If that enabling objective becomes obsolete we can take it out without destroying the structure of the curriculum piece or we can put it into another course where it may fit. So this has a lot of possibilities. Or you can do it by the performance objectives.

I think we have all kinds of work to do with the cluster concept. We are at least into the discussion stage of what we are going to do with the clusters such as the building trades. There is one school of thought that says we should always teach in a cluster at least to begin with. Another school that says they should only be taught about plumbing and electricity and so on. We would like to try out a core competency or orientation to building trades. Then the student would go off into strands and then perhaps come back for certain things that would be in common. I think it would allow for more course or use of course competencies and changes as the labor market changes. You might be able to change from one trade to another.

I think that another thing that we need to keep working on--we're working like mad on this--is the streamlining of materials in CBE design. CBE, as you know, creates masses of paperwork as witnessed by my one million impressions. But we are working on this whole example. We have gone to a CBE implementation guide. One copy of that gives you a recording system and occupational information and that type of thing. Then we do the task analysis part; they get that for whatever course or program. We're developing approximately 120 instructional resource guides which are the second level of what I was talking about in terms of levels. In addition, we are proposing that two years of a certain program service, if applicable, would account for one of the math credits. As you know our students only are turned on by math as they see that it has practicality; that you use it in a service session or you use it in a bookkeeping operation or whatever. We do have audio-visual materials, particularly on CBE implementation. We have identified audio-visual materials in our guides.

We are in a mass production mode. We have problems with mass dissemination. WE are so busy developing we can't get it out, as Becky and Ruth know. Oh, I'm sorry. (No time). There's a lot to be done and we think that through ECN and Becky's operation we can do this.

Spiro Mehail
Wisconsin

I am the Curriculum Instruction Coordinator which means I am reponsible for the professional development of the faculty which is a very important source for curriculum development. And in that process of curriculum development with professional courses that we offer our faculty, we have to teach them from the ground up the process of curriculum development. Our methods of instruction plus all the other necessary facets make this school, as Lou just mentioned, the greatest in the country and possibly the whole world. So much for that. But, these aren't concensus.

These are not my own personal remarks. These are the remarks of the entire state of Wisconsin as edited by the State Director. I will make some side remarks after this very short presenation after listening to what other people have been trying to say. I am not too sure how many are listening, but there is a lot of telling here.

According to this report, the services that are provided by the ECN for Curriculum Coordination and Technical Education is valuable and effective. It claims it is valuable and effective. And the specific services which make it valuable range from the development of the terminology dictionary for curriculum on one end of the spectrum to the comprehensive inventory of the task listing of over 1,000 occupational courses on the other. And as I understand there are over 25,000 curriculum products. A result is a standard curriculum format. And they have contributed to the development and diffusion, maybe sometimes confusion, of instructional resources among our vocational education system. They do support the development of curricula in the high tech areas and also enhance efforts of increasing what you have got--the publication, dissemination of your software acquisition, hopefully on the CB mode.

We also encourage the Network to pursue its efforts in needs assessment in curricula and develop curricula with the explicit emphasis on the optimum usage so the investment is also optimized. Software evaluation and review should also be strengthened, and of course continued. This is a collection accommodation of the part of Wisconsin VTAE system for curriculum coordination in general and especially your efforts in particular. They also want to cite the leadership provided by Mrs. Rebecca Douglass who is the Director, and the field has been exemplary.

We do urge the continued support of the curriculum network initiative as a viable federal project.

Am I allowed side remarks?

I couldn't help but overhear the problems you have in people entering the vocational technical system on the postsecondary level. We've had similar problems with people who have the credentials upon entering the required math and sciences courses but we also discovered a long time ago that credentials mean very little. So consequently when we did research on where our greatest attrition was occurring it was in the mathematics and science areas. That meant that our entering freshmen were unable to complete two years of technical training because of this lack of background. The point I am trying to make is, in order to get people through a very difficult curriculum, provide them with the prerequisites. We will still assume that they have the credentials but you've got to provide them with the prerequisites.

Thanks to the efforts of the National Science Foundation or any federal funding, as they are very important in acting as a catalyst to pursuing problems of this kind. We did resolve this problem by developing a very comprehensive technical mathematics basis which did save us a tremendous amount of students. We cut our attrition down by some 90 percent by providing students with prerequisites. Currently in the high tech area, as an aside, this shows you how important money is to these organizations who are concerned.

We got another National Science Foundation grant to pursue the computer-aided design and the computer-aided manufacturing. We were successful in producing software in this area. We hear a lot of talk today about the necessity for developing insight on emerging occupations. I think that's a misnomer. People that are in the trenches realize that the new technology is really a basis of the old. All you have to do is teach the people how to use the new tools that are available. Thanks to these federal programs we are able in many particular areas to use computer-aided design and computer-aided manufacturing. Not only in the obvious areas such as mechanical design or arcitectural design but also in the areas of commercial art, the welding, the numerical control, the tool and die making, and a number of others. These funds helped us develop our own faculty in these specific areas and also helped us produce packages that we are selling nationally to other schools in helping them implement in the high tech area.

You'll find that some of your existing problems have a direct application to high tech. We talk about robotics, but it's merely a take-off on hydraulics and electronics. So you have to look at your basic programs and build on those. We were successful in doing that and I think we are the leaders in this high tech development. I think we're the only two-year college in the country that has developed a program of this kind. We are also assisting four-year universities in this very area. When you have something that is viable to local industry, you have a tremendous amount of imput of personnel that are seeking that particular training.

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Arthur A. Binnie
District Director & President

Good morning and greetings to Mr. Robert Hewlett, Education Director, Region V, USDE, and to Ms. Rebecca Douglass, Director--ECNCC. This is Dr. Kenneth H. Mills, the Director of Instructional Services of Gateway Vocational, Technical and Adult Education District, Kenosha, Wisconsin. I have had the privilege of chairing the Instructional Services of the Wisconsin Vocational, Technical, and Adult Education system in the past year. In the present term I have the privilege of chairing the Program Operations Committee--a policy setting unit for the shared governance for the Wisconsin Vocational, Technical and Adult Education system. The efforts of curriculum development, dissemination, and statewide diffusion have been one of the most important items of priority in the State.

I am pleased to be able to provide input and comments to serve as instructional guidance for the future efforts of the East Central Network for Curriculum Coordination (ECNCC). The service provided by ECNCC for the vocational, technical education for the region has been valuable and effective.

The specific services ranging from the development of data element dictionary for curriculum on one end of the spectrum, the comprehensive inventory of Task Listings for over 1,000 occupational courses on the other end, and over 25,000 curriculum products such as detailed course contents and standard curriculum formats in between, have contributed to the development and diffusion of instructional resources among the Wisconsin Vocational, Technical and Adult Education system.

We support the development of curricula in the High Tech areas and an enhanced effort in publication, dissemination, and software acquisition. We encourage the ECNCC to pursue its efforts in needs assessment in curricula and develop curriculum with explicit emphasis on transportability so that the investment is optimized. The software evaluation unit could be strengthened and enhanced.

We commend the efforts of the National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE) in general, and ECNCC in particular. The leadership provided by Ms. Rebecca Douglass, the Director of ECNCC, has been exemplary. The curriculum development, dissemination, and utilization efforts have been further strengthened by the task force efforts for instructional resource sharing for the VTAE system in Wisconsin, co-chaired by Louis Chinnaswamy, the Curriculum Consultant and State Liaison Representative (SLR) for the State of Wisconsin. We urge the continued support of the curriculum network initiative as a viable project.

Signed October 26, 1983

Kenneth H. Mills
Director of Instructional Services
and Research & Planning Services

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APPENDICES

Appendix A	Public Hearing Flyer
Appendix B	Evaluation Form Overall Means

ANNOUNCEMENT

Open Meeting On Future Curriculum Development Needs In Vocational Education and Training

The East Central Network for Curriculum Coordination Center is sponsoring a public hearing with U.S. Department of Education Region V, Chicago, on October 26, 1983.

This public hearing is being held to learn about the regional curriculum needs and priorities. To this end, we invite your participation at the hearing.

Interested individuals and groups are invited to testify on future curriculum needs in vocational curriculum development. It is desirable to hear from as many people as possible--people in industry, business, education --who are involved in some aspect of preparing employees for the work force. We want to hear from people who use curriculum and are aware of present and future curriculum needs.

PURPOSE

The public hearing is intended to accomplish the following:

- Identify the existing and future curriculum needs.
- Establish both long term and short range goals.
- Determine the direction for the Center to best meet the needs of its clients.

MEETING INFORMATION

Site

October 26, 1983
USDE Region V Conference Room
12th Floor, Student Financial Assistance
300 South Wacker Dr.
Chicago, IL
Region V Education Director: Bob Hewlett

Agenda

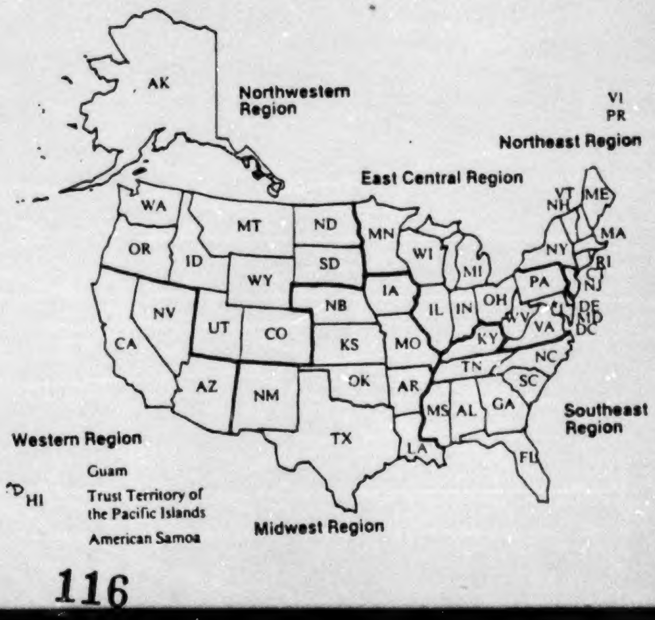
8:00 a.m.	Registration
8:30 a.m.	Briefing on Background by ECN Director
9:00 a.m.-Noon	Testimony/Comments
1:00 p.m.-4:30 p.m.	Testimony/Comments

BACKGROUND

The East Central Network for Curriculum Coordination is a network consisting of 12 states with headquarters in Springfield, Ill., and a representative in each state. The East Central Network is one of six networks making up the National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE). The names, locations, and regions of the Curriculum Centers are indicated on the following map. The East Central Network includes the states of U.S. Department of Education, Regions III and V.

These regional curriculum centers are supported under P.L. 94-482, Educational Amendments of 1976, Vocational Education. Program Improvement funds are available to the U.S. Assistant Secretary of Education under Subpart 2, Section 120 for research, development, and dissemination activities.

The funding cycle for the six centers is on a staggard time frame. The current funding cycle for the East Central Network is scheduled to end December, 1983 followed by a new three-year cycle of funding beginning January, 1984. The scheduled hearing should be beneficial in assisting the curriculum network administration to set realistic and effective goals to guide 1984-1986 Network activities.


AK
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KY
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Southeast Region
Western Region
Guam
HI
Trust Territory of the Pacific Islands
American Samoa
Midwest Region

NNCCVTE - SIX CCCs

The concept of a National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE) emerged from the recognition that curriculum development and dissemination efforts were often fragmented and duplicative.

The network consists of 57 State Liaison Representatives (SLRs), one in each of the states and trust territories; six Curriculum Coordination Centers (CCCs); and a national council made up of the six CCC directors.

The SLRs, who are appointed by vocational directors in their states, are the links in the Network. This linkage provides access to the Curriculum Centers and the development of curriculum and instructional materials within the network.

Through these six Centers and corresponding interstate networks, curriculum development products and services are shared throughout the nation. Other goals of the network are:

- To develop and recommend guidelines for curricula and curriculum development with the ultimate goal of increasing the effectiveness of curriculum materials and enhancing their transportability.
- To establish and maintain a system for determining curriculum needs in vocational-technical education and for reporting conclusions to the field.
- To coordinate activities in the curriculum development, dissemination, and utilization with the aim of avoiding unwarranted duplication, enhancing quality effort, increasing the transportability of curriculum materials, and improving their acceptance and use.
- To provide a mechanism for the sharing of information on curriculum materials available and under development.
- To report these curriculum coordination efforts to the field.

It is for the first three goals that testimony is especially being requested.

EAST CENTRAL NETWORK

East Central Network Center is the largest of the six Curriculum Centers in population, number of states and federal vocational curriculum funding. Its region is comprised of 12 states. The physical resources of the East Central Network include over 28,000 cataloged items, which includes books, audio-visual materials and informational brochures. The Center is unusual in that it makes these items available on a regional free loan basis. Other curriculum centers loan either in-house or in-state. Staff includes searchers, researchers and curriculum and information specialists. Goals of the Network are to:

- Increase availability of curriculum information and materials of priority significance to federal/state instructional program improvement personnel.
- Promote adoption and adaption of curriculum materials developed with the assistance from federal and state vocational education funds.
- Minimize duplication in vocational education curriculum development.
- Improve the quality of vocational education curriculum and diffusion services provided to public and private schools and colleges.

The Network exists to provide services to meet the curriculum needs of people involved in vocational education and training. It has made many contributions to curriculum as it continues to meet its clients' needs. Examples of resource booklets include A Guide to Educational Equity in Vocational Programs and East Central Resource Guide to Energy and Energy Related Programs in Vocational Education. Other contributions are the development and acceptance of a **standard curriculum format;** a compilation of state profiles which identifies the **practices regarding curriculum** development and dissemination; and **curriculum terminology,** a working tool comprised of concepts critical to curriculum development, and organized so that identical or similar word meanings and expressions have common counterparts. The **ECN Task List Catalog,** an extremely popular item with patrons, is coded using the OE and CIP Code and is currently the most comprehensive collection of task listings available.

Please help us with one more aspect of the hearing.........EVALUATION

As you know, evaluation is an essential component of any activity or project. It is the means for finding how successful a project is and how to improve the project for the next time.

This is a unique experience for the East Central Curriculum Center's staff. We would like input from you regarding the public hearing. Please take a few additional minutes of your time and respond to the following items. Additional comments would be appreciated.

ORGANIZATION	Excellent	Good	Fair	Poor
Advertisement of the hearing	1	2	3	4
Purpose of the hearing	1	2	3	4
Guidelines for the hearing	1	2	3	4
Instruction for submitting testimony	1	2	3	4
Directions for participation	1	2	3	4
Scheduling of testifiers	1	2	3	4

OTHER COMMENTS: ______________________________

REPRESENTATION	Excellent	Good	Fair	Poor
Composition of members of the panel	1	2	3	4
Diversity of vocational areas reflected by those testifying	1	2	3	4
Geographic area	1	2	3	4

OTHER COMMENTS: ______________________________

VALUE	Excellent	Good	Fair	Poor
New ideas, concepts exposed	1	2	3	4
Relevancy of ideas, concepts	1	2	3	4
Usefulness of hearing as a method to gain diverse input	1	2	3	4

OTHER COMMENTS: ______________________________

PLEASE USE THE OTHER SIDE OF THIS FORM TO COMMENT ON THE PROBLEMS AND STRENGTHS OF THE HEARING. DON'T FORGET SUGGESTED IMPROVEMENTS.
TURN FORM IN TO HEARING RECEPTION DESK AS YOU LEAVE.

THANK YOU!

Please help us with one more aspect of the hearing.........EVALUATION

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ORGANIZATION	Excellent	Good	Fair	Poor	3.4
Advertisement of the hearing	1	2	3	4	3.4
Purpose of the hearing	1	2	3	4	3.3
Guidelines for the hearing	1	2	3	4	3.5
Instruction for submitting testimony	1	2	3	4	3.3
Directions for participation	1	2	3	4	3.5
Scheduling of testifiers	1	2	3	4	3.3

OTHER COMMENTS: ______________________________

REPRESENTATION	Excellent	Good	Fair	Poor	3.0
Composition of members of the panel	1	2	3	4	3.0
Diversity of vocational areas reflected by those testifying	1	2	3	4	3.0
Geographic area	1	2	3	4	3.1

OTHER COMMENTS: ______________________________

VALUE	Excellent	Good	Fair	Poor	3.5
New ideas, concepts exposed	1	2	3	4	3.4
Relevancy of ideas, concepts	1	2	3	4	3.5
Usefulness of hearing as a method to gain diverse input	1	2	3	4	3.7

OTHER COMMENTS: ______________________________

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THANK YOU!

GUIDELINES FOR TESTIMONY

Two populations are served by the East Central Network. One consists of state education office personnel, university/college educators, and curriculum developers. Types of questions which could be addressed at the hearing are:

- Based on your past experience with the East Central Network, what are the most effective strategies and activities for improving curriculum quality?
- What would make for the most productive relationship to disseminate curricula between the East Central Network and other organizations regarding curriculum activities?

The other population consists of business and industry groups, public school teachers, and other organizations involved in the training of employees or people entering the work force. The types of questions which should be addressed at the hearing would be:

- What activities and client groups should the East Central Network concentrate on over the next several years?
- How can the delivery service by the East Central Network increase the effectiveness of training programs?

Both populations could address general questions such as:

- Where do you go for curriculum development assistance?
- What type of technical assistance should be provided you by your state office or a network such as the East Central Network?
- What future do you see in curriculum and instruction for media? computers? What specific assistance will help you in your situation to meet these needs?
- On what key curriculum issues should the East Central Network focus its work?

INSTRUCTIONS FOR TESTIMONY

The East Central Network would like to hear from anyone wishing to express views and advice which will lend guidance for the future direction of the Center.

The public is encouraged to attend and participate in the public hearing. If you are business/industry affiliated, a teacher or teacher educator; or supportive of vocational and technical education, **be an active participant by submitting oral, taped, or written testimony.**

Testimony for the hearing should be registered by phoning the Center by Oct. 7. Oral presentations will be limited to 10 minutes and speakers will be scheduled on a first-come basis. The oral testimony should be accompanied by a written statement to be included in the hearing record.

For taped testimony, the recording should be made on a cassette tape and accompanied by a written document. This taped testimony will not appear in full text in the proceedings of the hearing. Anyone planning to submit taped testimony should contact the Curriculum Center or SLR. (See names and addresses on back page.)

Members of the hearing panel will be representatives of the U.S. Department of Education, interested legislative leaders and representatives of the National Network for Curriculum Coordination in Vocational and Technical Education.

Following the hearing all contributions will be reviewed. Proceedings will be published containing testimony of those persons testifying in person and a summary of other testimony.

The elements approved by the State Liaison Representatives will provide the basis for the future work of the Curriculum Network. The completed proceedings document will be sent to the U.S. Department of Education for documentation. Copies of the document will be sent to the other regional curriculum coordination centers and to the American Vocational Association. The proceedings will help provide a framework for the continuation of the East Central Curriculum Coordination Network concept.

EAST CENTRAL NETWORK FOR CURRICULUM COORDINATION PERSONNEL

The East Central Network State Liaison Represenatives are listed below. Director of the Network is **Rebecca S. Douglass,** Illinois Vocational Curriculum Center, Sangamon State University, E-22, Springfield, IL 62708. 217/786-6375 or in Illinois 800/252-8533.

****

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For additional information, clarification, or for those who want to participate contact the center by Oct. 7.

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